Institute for Global Environmental Strategies

DECENTRALISATION and STATE-SPONSORED COMMUNITY FORESTRY in Asia

Seven country studies of transitions in forest governance, contemporary forest management and the prospects for communities to contribute to and benefit from sustainable forest management

IGES
Institute for Global Environmental Strategies

Decentralisation and state-sponsored community forestry in Asia

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Edited by
Henry Scheyvens, Kimihiko Hyakumura, and Yoshiki Seki

Institute for Global Environmental Strategies (IGES)
Forest Conservation Project
2108-11 Kamiyamaguchi, Hayama, Kanagawa 240-0115, Japan
Tel +81-(0)46-855-3700
Fax +81-(0)46-855-3709
E-mail iges@iges.or.jp
Web http://www.iges.or.jp

Forest Conservation Project
Kimihiko Hyakumura, Henry Scheyvens,
Kazuhiro Harada, Federico Lopez-Casero,
Yoshiki Seki, Kanaru Segawa

ISBN: 4-88788-031-6

Printed and bound in Nepal by
Worldwide Print Support, Tel: 00977-1-5555989, Email: wwpsdm@wlink.com.np

FOREWORD

Forest management in many parts of Asia remains in a state of crisis. Despite the efforts of international and regional organisations, national and local governments, environmental NGOs and many others, most forests in Asia are still not managed under robust frameworks that ensure their sustainable management and equitable access, use and sharing of benefits. Rates of deforestation remain alarmingly high in many countries, contributing to global warming, high rates of species extinction, soil erosion, the pollution of waterways and landscape destabilisation.

As part of its third phase strategic research programme, April 2004 – March 2007, the Forest Conservation Project of the Institute for Global Environmental Strategies commissioned seven country studies - India, Nepal, Cambodia, the Philippines, Thailand, Viet Nam and China - on transitions in forest governance.

The country studies focus on two region-wide transitions: decentralisation and state-sponsored community forestry. That both transitions contribute as much as possible to sustainable forest management in Asia is critical. Both decentralisation and community forestry are particularly important for a large proportion of the rural poor who depend upon forests for their subsistence and developmental needs. They have largely been excluded from policy-making processes and forest policy has severely restricted their rights to use and manage forest resources.

While the focus of this study is on transitions in forest governance, the individual studies stand as important reference documents of the current state of forest management. They provide detailed descriptions of the regulatory and institutional frameworks for forest management at national and local levels. The introductory chapter describes the conceptual and analytical framework of the study, summarises the results of the country studies and draws out shared lessons from the diverse experiences with decentralisation and formal community forestry in the seven study countries.

A number of past and current IGES staff contributed to this publication. The research exercise was formulated under the leadership of Professor Makoto Inoue and Dr. Bishnu Bhandari, both former staff of the Forest Conservation Project. Mr. Timothy Skye provided invaluable editorial support and Ms. Segawa Kanaru offered a high level of secretarial assistance.

Any errors or omissions in this publication are the responsibility of the editors/authors alone. We would appreciate being informed of any corrections that are required to improve the accuracy of this publication.

I hope that this report will serve as a useful reference document for researchers and practitioners in the fields of forestry and rural development, and that it produces a lively and constructive debate on the relative merits of different forest management strategies developed by Asian countries.

Akio Morishima
Chair,
IGES Board of Directors

Hayama, Japan
December 2006

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EXECUTIVE SUMMARY

This study examines two major transitions in forest governance - decentralisation and state-sponsored (formal) community forestry - with respect to whether they are opening spaces for communities to contribute to sustainable forest management. Our main thesis is that there is a need for democratic decentralisation in order to effectively re-engage communities in forest stewardship.

The study consists of an introductory chapter and seven individual country studies – India, Nepal, Cambodia, the Philippines, Thailand, Viet Nam and China. It employs a critical, structured approach to separate the realities of decentralisation and community forestry from the ideologies that often accompany these movements and to allow for comparison of policies and impacts between countries. Each country study describes and analyses the history of forest management; the current state of forest governance with respect to policy, legislation and institutions and how these are played out at different levels (local, provincial and national), and; decentralisation and community forestry policies and their impacts. Case studies of community forestry are provided to illustrate how the transitions are played out at the local level and each country study finishes with policy recommendations to improve decentralisation processes and formal community forestry programmes as instruments of sustainable forest management.

The major findings are:

1. The nationalisation of forests, the establishment of centralised forest administration structures, the focus of forest management on production and faith in the scientific forestry paradigm characterised forest management in the study countries until recent decades. Production to supply domestic industries or to bring in foreign exchange was generally prioritised over other objectives of forest management. These policies were all oppositional to community participation in forest management.

2. Concessions were introduced as the main form of forest management in Cambodia, Thailand and the Philippines. They had devastating environmental impacts and further entrenched systems of weak forest governance. In the socialist countries, governments set production targets for the state forest enterprises based on predicted demand rather than on estimations of forest capacity, resulting in widespread deforestation and forest degradation.

3. Wide-ranging decentralisation policies were introduced by all of the study countries, though significant variations exist in timing and form. Decentralisation legislation gave local governments greater responsibilities for natural resource management (e.g., the Local Self Governance Act (1999) in Nepal, the Local Government

Code (1991) in the Philippines, and the Tambon Administrative Act (1994) and the Decentralisation Act (1999) in Thailand). In China and Viet Nam, decentralisation provided opportunities for private actors (households and companies) to participate in forest management. In India, Joint Forest Management was the primary manifestation of the decentralisation of forest management.

4 The extent and impacts of decentralisation have been limited by unstable and unpredictable policies caused by changes in political leadership; the desire of higher level forest administrators to retain the status quo that provides their influence; a lack of confidence amongst foresters in the ability of local communities to manage forests; the reluctance of administrators to transfer the necessary resources and authorities for local agencies to undertake their newly devolved duties; the manipulation of the decentralisation process by local elites for their own advantage, and; a lack of awareness of rights and responsibilities at the local level.

5 Incomplete decentralisation can lead to unreasonable restrictions and uncertainty for communities. Unreasonable restrictions on access to forest products may be imposed by central governments that are not sufficiently in touch with local realities. Moreover, the decisions of local governments may be over-ruled by higher authorities that are not familiar with local circumstances. Contradictory policies will also most likely exist when decentralisation is incomplete.

6 Decentralisation can result in conflicts between competing interest groups, but it also creates opportunities for new alliances to promote rural development and forest management. Despite the shortcomings of current policies, decentralisation has provided opportunities for governments to more effectively support community forestry.

7 In India, Nepal, the Philippines, Viet Nam and China, the number of people participating in forestry and the area of forests managed by communities/households has increased dramatically since decentralisation policies and community forestry programmes were introduced. Progress has been slower in Thailand, where the Constitution recognises the rights of communities to manage forests by where community forestry legislation is yet to be enacted, and Cambodia, where community forestry has only recently been included as part of the national forest management strategy.

8 Fundamental differences exist in the approaches taken by the non-socialist and socialist countries to encourage local participation in forest management. The non-socialist countries have generally established nationwide community forestry programmes supported by regulatory frameworks and accompanying guidelines. Paradoxically, the socialist countries, which were formerly associated with centrally planned economies, may have devised a wider variety of social arrangements for local people to participate in forestry. Viet Nam and China support forest management not only by communal bodies, but also by individual households. The seemingly more flexible approach adopted by China and Viet Nam to promote participation in forest management could provide instruction to other countries.

9 Commonly, community forestry programmes are characterised by co-management involving the forest department and local communities, renewable long-term lease agreements that define management and use rights, and some form of benefit sharing between the state and communities. It is rare for the state to transfer land ownership to communities and property rights are usually restricted to the ownership of trees and forest products. China, where collectives own over half of the nation's forestlands, is an exception.

10 As with decentralisation, the impacts of the community forestry programmes in the study countries have been mixed, but the country studies indicate that community forestry can deliver significant environmental, social and economic benefits.

11 Further reform is needed to develop legal frameworks that institutionalise community

forestry and provide communities with secure tenure. Unsecured access and use rights discourage long-term community investment in forestry. Benefit sharing arrangements also require reform to provide sufficient incentives for communities to invest in forest management. Under some existing arrangements communities are only provided with management rights for degraded land, their use rights are insecure, their access to commercially valuable timber and non-timber forest products is unjustly restricted and/or regulations prohibit legitimate livelihood activities on forestlands.

12 Both the costs and benefits of community forestry must be shared equitably. In some countries the rural elite benefit more from community forestry than marginalised social groups, yet the latter are expected to contribute the most labour to community projects.

13 Each of the study countries has developed regulations and guidelines for establishing community-based forest management groups (e. g., forest protection committees in India, forest user groups in Nepal, people's organisations in the Philippines) or has sought to recruit existing groups for forest management (e.g., people's committees in Viet Nam and collectives in China). The achievements of these groups have been significant and extend beyond forestry to broader community development.

14 To promote community forestry, forest departments have generally preferred creating and implementing standardised organisational models for uniform application over utilising existing "natural" organisations. However, establishing democratic, transparent and accountable community-based forest management organisations has proved challenging. Where effective local arrangements exist, community forestry regulations should be sufficiently flexible to take advantage of these.

15 Communities may have insufficient social capital for equitable forest management as their existing decision making processes may be undemocratic and may not lead to desirable outcomes for weaker social groups. They may not have sufficient checks and balances or knowledge to manage natural resources sustainably in a context of rapid economic and social change associated with increased opportunities and pressures. Therefore, flexibility to use and build upon existing social arrangements is desirable, but controls are required to ensure that community forestry is equitable and sustainable. Measures to build the confidence of weaker social groups in forest management are required as they may be reluctant to speak out at forest management group meetings and/or may not have the time to attend, and as more influential members may not be interested in their opinions.

16 The links between community forestry and rural poverty reduction must be augmented. The initial objectives set for community forestry were to rehabilitate degraded land or establish new forests. However, the country studies show that community forestry can also contribute to livelihoods through income generating activities and resource conservation. There is a need to empower communities through awareness raising of their rights and responsibilities associated with decentralisation and community forestry policies. Building trust relationships between communities and forestry officials is also critical for community forestry to succeed.

17 An adaptive, learning approach should be adopted that incorporates systematic monitoring and feedback to fine-tune existing community forestry programmes.

GLOSSARY AND ABBREVIATIONS

A&D	alienable and disposable (lands)
ADB	Asian Development Bank
AFFLA	agro-forestry farm lease agreement
AoP	Assembly of the Poor, Thailand
APFD	Andhra Pradesh Forest Department
barangay	lowest political unit, the Philippines
BWOA	Barobbob Watershed Occupants Association
CADC	certificate of ancestral domain claim
CADT	certificate of ancestral land title
CBD	Convention on Biological Diversity
CBFM	Community-Based Forest Management programme, the Philippines
CBFMA	community-based forest management agreement
CBS	Central Bureau of Statistics, Nepal
CCP	Chinese Communist Party
CENRO	community environment and natural resources office
CEO	chief executive officer
CFM	Community Forestry Management programme, Andhra Pradesh, India
CFM	Collaborative Forest Management, Nepal
CFP	Community Forestry Programme
CFUG	community forest user group
CIFOR	Centre for International Forestry Research
CITES	Convention on International Trade in Endangered Species
CNY	Chinese Yuan Renminbi
CP-NPM	Community Participation in National Park Management programme
CRMF	community resource management framework
CTF	Communal Tree Farming programme
Dadi Yuanlinhua	make the land a green garden!
DANIDA	Danish International Development Agency
DENR	Department of Environment and Natural Resources, the Philippines
DFCC	district forestry coordination committee
DFID	UK Department for International Development
DFO	divisional forest officer, India
DFO	district forest office, Nepal

DFW	Department of Forestry and Wildlife, Cambodia
DILG	Department of Interior and Local Government, the Philippines
DNP	Department of National Park and Wildlife, Thailand
DOF	Department of Forestry, Viet Nam
DOFP	Department of Forest Protection, Viet Nam
Doi Moi	A package of economic reform measures introduced by Viet Nam in 1986 (literally, "change and newness")
DNPWC	Department of National Parks and Wildlife Conservation, Nepal
EO	executive order
FAO	Food and Agriculture Organisation of the United Nations
FAR	Family Approach to Reforestation programme
FD	Forest Department, India
FDAs	forest development agencies
FDC	Forestry Development Centre
FECOFUN	Federation of Community Forest Users
Fengshan yulin	fenced wastelands and deforested areas for the natural regeneration of forests
FINNIDA	Finnish Department for International Development Co-operation
FMB	Forest Management Bureau, the Philippines
FOM	Forest Occupancy Management
FPC	forest protection committees
FSI	Forest Survey of India
FYWP	five-year work plan
GCC	Girijan Cooperative Committee
GDP	Gross Domestic Product
GoI	Government of India
gram sabhas	general village body
ha	hectare
HMGN	His Majesty's Government of Nepal (now, Government of Nepal)
ICCS	indigenous cultural communities
ICEM	International Centre for Environmental Management
ICFRE	Indian Council of Forestry Research and Education
IEE	initial environment examination
IFMA	integrated forest management agreement
IFSR	Independent Forest Sector Review, Cambodia
IIED	International Institute for Environment and Development Illaka sub-district
IPRA	Indigenous Peoples Rights Act, the Philippines
IPs	indigenous peoples
IRA	internal revenue allotment
ISFP	Integrated Social Forestry Programme
ITDA	Integrated Tribal Development Agency
ITTO	International Tropical Timber Organisation
IUCN	World Conservation Union
JFM	Joint Forest Management
JFMCs	Joint Forest Management Committees
Kamnan	sub-district headman
Kho Jo Kor	Military Land Distribution Programme
Lao PDR	Lao People's Democratic Republic
LGU	local government unit
LOI	letter of intent

luhua zuguo	green the homeland!
MAFF	Ministry of Agriculture, Forestry and Fisheries, Cambodia
MARD	Ministry of Agriculture and Rural Development, Viet Nam
MOA	memorandum of agreement
MoEF	Ministry of Environment and Forests, India
MFSC	Ministry of Forests and Soil Conservation, Nepal
MPFS	Master Plan for the Forestry Sector, Nepal
muyong	Indigenous forest management system developed by the Ifugaos in the northern Philippines
NAEB	National Afforestation and Eco-development Board, India
NAMRIA	National Mapping and Resource Information Authority
NARMSAP	Natural Resource Management Sector Assistance Programme
NCA	National Commission on Agriculture, India
NEDA	National Economic and Development Authority, the Philippines
NESDB	National Economic and Social Development Board, the Philippines
NFAP	national forestry action programme
NGOs	non governmental organisations
NIPAS	National Integrated Protected Area System, the Philippines
NSCB	National Statistical Coordination Board, the Philippines
NSO	National Statistics Office, the Philippines
NTFP	non-timber forest products
PACBRMA	protected areas community-based resource management agreement
PAMB	protected area management board
Panchayat	village council
PCCF	principal chief conservator of forests
PD	presidential decree
PENRO	provincial environment and natural resources office
PFM	participatory forest management
PIL	public interest litigation
PLA	People's Liberation Army
PO	people's organisation
PRC	People's Republic of China
PRIs	*panchayati raj* institutions
PSFTFAD	Provincial Special Task Forces on Ancestral Domains, the Philippines
RECOFTC	Regional Community Forestry Training Centre
RENRO	regional environment and natural resources office
RFD	Royal Forest Department, Thailand
RGC	Royal Government of Cambodia
ropani	508.72 square meters
Rs	rupees
RUP	resource use permit
Sarpanch	*panchayat* head
SC	scheduled caste
SFA	State Forestry Administration, China
SFE	state forest enterprise
SGS	Société Générale de Surveillance
SIFMA	socialised integrated forest management agreement
sitio	hamlet
ST	scheduled tribe

Tambon	sub-district (smallest functioning government administrative level, Thailand)
TAO	Tambon Administrative Organisation
Tendu	leaves from Diospyros melanoxylon tree, commonly filled with tobacco and rolled into cigarettes
TFLA	tree farm lease agreement
THB	Thai Baht
TLA	timber license agreement
Tole	hamlet of community households
Tree *patta*	a contractual arrangement that provides user rights of the tree resource by the holder
Tuigeng huanlin	Land Conversion Programme from Farmland to Forest
UDP	Upland Development Programme
UNDP	United Nations Development Programme
UNHCHR	United Nations Cambodia Office of the High Commissioner for Human Rights
USAID	United States Agency for International Development
USD	United States Dollar
Vanasamakhya	network of forest protection groups in Andhra Pradesh
VFCC	village forestry coordination committee
VND	Vietnam Dong
VSS	*vana samrakshana samithi* (village forest protection committees)
WEFCOM	Western Forest Complex Ecosystem Management Project
Yinglin cun	forest managing villages
Ziliushan	Collective forest with use rights given to households (literally, “family mountain”)

1

FOREST GOVERNANCE IN A STATE OF TRANSITION

Overview of transition, analytical framework, summaries of country studies and synthesis

Henry Scheyvens[1], Kimihiko Hyakumura[2] and Yoshiki Seki[3]

[1] Forest Conservation Project, IGES (schevyens@iges.or.jp).
[2] Forest Conservation Project, IGES (hyakumura@iges.or.jp).
[3] Forest Conservation Project, IGES (y-seki@iges.or.jp).

Introduction

The term governance has become a central part of the parlance of development and conservation discourses. Kofi Annan, secretary general of the United Nations, described good governance as "perhaps the single most important factor in eradicating poverty and promoting development" (UNDP 2002, 51). The concept of governance is particularly relevant for forests, which tend to be highly contested resources because of their economic value, their potential to influence political fortunes, their private and public benefits and because of contending stakeholder views of how they should be managed and who has the right to participate in decision making. As Jack Westoby (former director, Programme Coordination and Operations, Forest department, Food and Agriculture Organisation (FAO)) pointed out, the inability of governments to manage forests sustainably is more a governance than a technical issue:

> *There is no technical fix which can save tropical forests. The main instruments of forest destruction are the disinherited of tropic forest countries: peasant farmers, shifting cultivators, rural landless. But these are the agents not the causes. Their pressure on the forest is steadily increasing as a consequence of policies bent on preserving a highly skewed distribution of private property in land and other resources. The pressure will inevitably increase, until there is more equal access to land and other resources. This is not a sufficient condition for saving the tropical forests, but it is a necessary condition (cited in Colchester 1995, 10).*

Forest governance is in a state of transition. For Edmunds et al. (2003, 1), this is "one of the most dramatic transformations in natural resource management in modern history." The elements of this transition include decentralisation/devolution, the promotion of community forestry, privatisation and land tenure reform. The transition offers new avenues for sustainable forest management, but also entails risks. It is particularly important for the rural poor.

In this study we are primarily interested in the parallel processes of decentralisation and community forestry with respect to whether they are opening spaces for local people to have a greater input into forest management. The impacts of both processes are mixed and have fallen short of the early expectations that were based on overly simplistic theoretical propositions. Nevertheless, most observers agree that these processes are essential to promote pluralism in forest management, and that pluralism is necessary for forest conservation, the recognition of rights and a more equitable sharing of benefits.

The introductory chapter is divided into three parts. First, we lay the foundations for the suc-

ceeding chapters by describing the historical backdrop of the forest governance transition, the significance of governance for forest management, the rationale for the study and the research framework. Second, we summarise the results of the seven country case studies and describe some of their commonalties and differences. Finally, we explain the shared lessons that can be drawn from these studies. The subsequent chapters present the individual country case studies.

PART A: **Overview of transition and analytical framework**

Historical roots of the forest governance transition

To understand the driving forces for the transition we are seeing in forest governance and the potential for improvement of this process, the historical roots of the transition must be understood. This section paints the history of forest use and management in Asia with a necessarily broad brush and it is important to acknowledge that many exceptions to this description exist.[4]

Banerjee provides the following description of forest management in the Asia-Pacific region prior to colonisation:

> *Until the 16th century, the forestland in the Asia-Pacific region was mostly used by local communities for hunting and gathering, and distinct forms of shifting cultivation (Banerjee 1995a). In addition, forests were felled for sedentary agriculture and home gardens were introduced. Forest areas were usually controlled by a single or group of households, except in the case of hunting and gathering activities where control rested with the community. Land ownership was communal or land belonged in some vague terms to the sovereign. Land and forest management, however, rested with households (Banerjee 2000, 39).*

[4] For example, two of the case study countries, China and Thailand, were never colonised by European powers, but they established centralised forest management systems.

The number of indigenous forest dwellers was regulated by the fact that edible forest products represent only a small proportion of the forest biomass (Sponsel et al. 1996, 6). Swidden agriculture was practiced by upland communities living on the fringes of forests and was adapted to match the regenerative capacity of forests. Some sultanates and kingdoms also had an interest in the trade in forest products which Jong et al. (2003, 11) describe as "the major source of revenue and wealth until the colonial era." However, forests were generally managed in a devolved fashion with decisions regarding access and use being made by those living close to the forests.

Forests were not initially of major interest to the colonisers, other than for exploitation for quick profit: for example, teak extracted from India and Java for shipbuilding (Lynch and Talbott 1995, 32). However, interest grew in the eighteenth and nineteenth centuries when the forests in Europe could no longer supply the needs of the colonial navies. The colonial governments introduced centralisation policies to tighten their control over forests and established forest departments in the late nineteenth century to regulate forest access and use.

White and Martin (2002, 2) note that modern forestry and the tradition of state ownership of forests had their roots in medieval Europe. Both of these traditions were exported to the colonies in the sixteenth and seventeenth centuries. The scientific forestry paradigm evolved in Germany with the notion of the "standard tree," that is, a tree that would produce a high and assessable wood yield (Lowood 1990, cited in Potter 2003, 30). These ideas were developed into a training programme that aimed to transform existing forests into assemblages of high value trees. This model, or a least the concept that forests should be managed, was introduced to Europe's colonies in the 1850s (Potter 2003, 31), despite the fact that most forests in Asia bore little resemblance to the managed forests of Europe. In the first half of the twentieth century, the British and French began experimenting with silviculture to develop sustainable forms of forestry in their colonies (Poore 2004, 9). The colonial forest departments established reserves to develop silvicultural techniques to encourage the growth and regeneration of commercially valuable species. The concept of sustainable yield that had been applied in medieval Europe was introduced into some tropical countries. Plantations were developed from the nineteenth century onwards to supply European markets and industry with products such as sugar cane, coffee and rubber that could not be produced in temperate climates. The two major economic activities of the colonial powers that affected topical forests were thus the occupation of territories for estate crop production and the extraction of forest products for export to the lucrative European markets.

The agendas, policies and actions of the colonial forest departments had enduring impacts (Jong et al. 2003, 13). The independence movements after World War II also left an indelible mark on the politics of forest management. During the colonial period, local elite groups established themselves by supporting trade and other interests of the colonisers. Some joined the independence movement and were able to reassert their influence after independence, thereby laying the "foundations of the elite/military alliances that continue to dominate some countries in the region" (Lynch and Talbott 1995, 51). After independence, the elite preserved the administrative structures of the colonial systems: "For the most part, the colonial states simply converted into nation states with virtually identical bureaucracies and many of the same officials, although in some countries the military assumed greater prominence" (ibid.).

The rates of deforestation in the tropical countries of Asia began to climb in the late 1950s due largely to land clearance for agriculture and settlement (Poole 2004, 13). In most countries with extensive forest cover, user rights and management authority were transferred to large-scale private forestry industry through concession agreements (White and Martin 2002, 8). The chainsaw and the tractor made rapid large-scale timber extraction possible.

The small forest bureaucracies of the newly independent states found themselves incapable of monitoring and enforcing the concession agreements. Moreover, the allocation of timber concessions was used as a means of "mobilising wealth to

reward allies and engender patronage" (Brack and Hayman 2001). In the worst cases the forest departments could become "clients of concession-holding industrial interests of the ruling elite, exercising their power as a form of private property rather than a public service" (ibid.).

The high deforestation rates contributed to the development of a global conservation movement that grew to prominence in the 1960s. The early conservation theories were described as elitist as they were based on Western concepts of nature that sought to exclude rural people from forests. These preservationist approaches were characterised by "fines and fences" strategies and were described by some critics as "fortress" conservation (Fisher et al. 2005, 20). Fortress conservation further served to divest local communities of control over forest access and use. Moreover, the preservationist approaches appeared to do little to suppress the alarming rates of deforestation. FAO (2006) estimates that 13 million hectares of forest per year were lost during the period 1990–2005 and finds no evidence of this rate decreasing.

The system of formal forest management that was briefly described had a number of important implications for forest governance. First, forest management was centralised as it was believed that the state had to control the access of local people to forests. Second, the state claimed ownership of forests, allowing it to manage forests as it saw fit–ostensibly in the interests of the nation at large. Third, professional foresters were made responsible for managing the states' forests as it was believed that they held superior knowledge. Fourth, local people were excluded from forests by the establishment of protected areas and through the granting of concessions to private industries.

Proponents of this system of forest governance were reluctant to accept its faults when it proved unable to control deforestation. Instead, they explained deforestation as a consequence of poverty, population growth and shifting agriculture (Colchester 1995). These explanations, while having some factual basis, diverted attention from deeper structural issues. Lohmann (1995, 16) bluntly describes such explanations as "myths" that prevented anyone from "pointing the finger at modern market and state systems as destroyers of livelihood."

The historical processes described above provided the drivers for change in forest governance that are associated with the present period of transition, which began in about the early 1980s. The transition is characterised by two reversals of commonly held beliefs of scientific forestry: 1) local people were no longer viewed as threats to forests, rather they were perceived as having relevant knowledge and important roles to play in forest management, and 2) that decision-making should not be entirely centralised, rather decisions should be made by institutions that were in closer touch with forest realities.

White and Martin (2002, 2-3) suggest that the following three primary considerations were the drivers for the transition:

- Governments are aware that existing forest administration systems discriminated against indigenous people and other local communities.
- There is growing evidence that local communities excluded from participating in forest management can be effective forest managers.
- Governments have done a poor job of managing state forests.

This analysis is somewhat simplistic and ignores some of the more pragmatic concerns, for example, how to manage vast expanses of forests with small bureaucracies and budgets, and the role that external agents such as donors played as drivers. Edmunds et al. (2003, 1) provide a more sophisticated analysis recognising the following factors as a "confluence of political pressures" that began to prompt governments to devolve natural resource management during the 1980s:

- Overextended government bureaucracies began to look for ways to cut costs.
- Environmentalists painted images of sustainable resource management based on an intimate economic and cultural connection

between local people and natural resources, as well as images of more effective resource protection by those living in close proximity to natural resources.

- The poor and their advocates hoped that local control would help them to protect local livelihoods and capture a greater share of the other benefits of natural resource management.
- Development specialists demonstrated the feasibility of working with local communities, and an ideological movement was developed that supported more small-scale, bottom-up and locally responsive measures based on local people's self-determination, in contrast to development strategies focused on large, imposed infrastructural investments.
- Political reformers argued that direct public involvement in resource management and greater public oversight of (more accessible) local officials were ends in themselves, and that such decentralisation improved civic culture.

All of these drivers stress the importance of governance to sustainable forest management, rather than technical issues. Governance reform, rather than a fine-tuning of existing practices, is now broadly acknowledged as critical for combating deforestation. In their recent work, *Policy that Works for Forests and People*, Mayers and Bass (2004, 220) insist that "almost every aspect of forestry is a political issue." The Centre for International Forestry Research (CIFOR) provides further colour to this assertion:

> *If we are to understand why species-rich forests are destroyed, or forest-dwellers are losing their land and livelihoods, we need to look far beyond the chainsaw, the plough and the individuals immediately responsible. We need to understand how the decision-making process works, and how the people who make decisions exercise their power and authority. We need to look at laws, policies, regulations and the systems of property rights which determine whether or not forests are managed sustainably. In short, we must focus on governance (CIFOR 2003, 27).*

The call for a "focus on governance" has it roots in the recognition that certain groups have benefited from the exploitation of forests, while others have suffered. Power relationships have greatly influenced patterns of wealth and poverty associated with forest management. Power has, in many instances, determined who has a say in how forests are managed and who benefits. As CIFOR explains,

> *Forests are used and coveted by a remarkable array of different interests, ranging from peasant farmers to logging companies, from forest departments to conservationists, from charcoal-makers to collectors of medicinal plants. Some wield great influence and power; others have little or none at all. Some are quoted on international stock markets; others live in thatched huts without electricity (CIFOR 2003, 27).*

The concept of good governance

As with other popular concepts in the conservation and development discourses, definitions of governance abound. The Commission on Global Governance provides the following lengthy definition:

> *Governance is the sum of many ways individuals and institutions, public and private, manage their common affairs. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action may be taken. It includes formal institutions and regimes empowered to enforce compliance, as well as informal arrangements that people and institutions have either agreed or perceived to be in their interests (cited in Dhungel 2002).*

This definition is instructive in highlighting that governance is not the purview of governments alone, nor that it refers only to formal decision-making arrangements. Managing "common affairs" is an issue for both state and non-state institutions, and arrangements to manage these affairs can clearly be informal. A more succinct but nevertheless complementary definition is provided by the Institute on Governance:

> *Governance is the process whereby societies or organisations make important decisions, determine whom they involve and how they render account (Institute on Governance, http://www.iog.ca/).*

It becomes clear from these definitions that governance refers to the types of decisions that are made by different actors at different levels of society.

The concept of an ideal state of governance, or at least elements of such a state, can assist in gauging the present transition in forest governance. The United Nations Development Programme (UNDP) identified the following nine principles of good governance:

- **Participation —** All men and women should have a voice in decision making, either directly or through legitimate intermediate institutions that represent their interests. Such broad participation is built on freedom of association and speech, as well as capacities to participate constructively.
- **Rule of law —** Legal frameworks should be fair and enforced impartially, particularly the laws on human rights.
- **Transparency —** Transparency is built on the free flow of information. Processes, institutions and information are directly accessible to those concerned with them, and enough information is provided to understand and monitor them.
- **Responsiveness —** Institutions and processes try to serve all stakeholders.
- **Consensus orientation —** Good governance mediates differing interests to reach a broad consensus on what is in the best interests of the group and, where possible, on policies and procedures.
- **Equity —** All men and women have opportunities to improve or maintain their well-being.
- **Effectiveness and efficiency —** Processes and institutions produce results that meet needs while making the best use of resources.
- **Accountability —** Decision makers in government, the private sector and civil society organisations are accountable to the public, as well as to institutional stakeholders. This accountability differs depending on the organisation and whether the decision is internal or external to an organisation.
- **Strategic vision —** Leaders and the public have a broad and long-term perspective on good governance and human development, along with a sense of what is needed for such development. There is also an understanding of the historical, cultural and social complexities in which that perspective is grounded (cited in Graham et al. 2003, 3).

These principles present an ideal state or model of governance that the UNDP believes all societies should strive for.

Elements of the transition

This study examines the spaces that the transition in forest governance are opening for communities to have an input into forest management. Our main interests are democratic decentralisation and community forestry programmes. Other elements of the transition are privatisation and land reform, which we include in our analysis of decentralisation.

Decentralisation

Decentralisation is not a new concept. In the 1950s and 1960s, the British and French colonial administrations began devolving responsibilities for some programmes in preparation for independence. However, some countries recentralised as part of their nation building strategies (Futardo 2001, 3-4). Nevertheless, decentralisation has become almost a global project over the past two and a half decades. Over eighty per cent of countries are thought to be implementing some degree of decentralisation (Manor 1999). Of all the natural resource-related sectors, decentralisation policies have been the most extensive in forest management (Edmunds and Wollenberg 2003). Decentralisation in the forestry sector is particularly evident in Asia.

The language and hence the objectives of decentralisation have changed. Decentralisation in ear-

lier periods that stressed the need for "national cohesion, effective rule and the efficient management of rural subjects" has been replaced with decentralisation associated with an "emancipatory language of democracy, pluralism and rights" (Larson and Ribot 2004, 1).

The theoretical argument for decentralisation with respect to democratic governance has been summarised by Futardo (2001), who explains that decentralisation is expected to:

- ensure the provision of social services in a given locale;
- draw on local knowledge and preferences;
- give people at local levels a stronger sense of ownership over projects and programming, thus making these more sustainable;
- enhance the public accountability of bureaucrats, elected representatives and political institutions, thus ensuring greater responsiveness in government;
- promote local self-reliance; and
- promote monitoring, evaluation and planning at the local level and enhance community participation in decision making (Furtardo 2001, 4).

Hans et al. (2004, 4) provide a comprehensive typology of decentralisation, recognising four types — political, administrative, fiscal and market. They further divide administrative decentralisation into deconcentration, delegation and devolution. For the purposes of this study, a less complex typology that distinguishes between decentralisation that only transfers power within the formal administrative structure and decentralisation that provides openings for local people to have a greater say in forest management is sufficient. The first type of decentralisation is administrative decentralisation and the second type can be defined as democratic decentralisation (Ribot 2002). The former is concerned with upward accountability and the latter with downward accountability. As with Larson (2004), it is democratic decentralisation that we use to assess the changes that have taken place. Decentralisation and devolution are often confused.[5] In this study we refer only to decentralisation, other than when authors use the term devolution in the country case studies.

Anderson (2000) suggests four concepts to assist the assessment of decentralisation– subsidiarity, empowerment, pluralism and social capital. *Subsidiarity* is the principle that decision making should be allocated to the lowest possible level where competencies exist. It seeks to minimise costs and maximise social well-being. Subsidiarity can be used to evaluate decentralisation by encouraging analysis of local capabilities and comparison of competencies between entities. The concept of *empowerment* allows us to examine whether decentralisation impacts on the options available to marginalised groups and the opportunities for them to participate in decision making. Decentralisation implies a movement toward *pluralism*, where the numbers and types of actors participating in forest management increases. The concept encourages us to examine mechanisms to deal with the expected diversity in views and aspirations, and the power imbalances between the different actors seeking to assert their interests. *Social capital* can be defined as norms of reciprocity, networks and trust (Anderson 2000, 19). It is an important determinant to the success of decentralisation strategies that prompts us to look beyond the community as a homogenous unit.

Community forestry

Despite the efforts by the state in many countries to centralise forest management, communities continued where possible to employ their own systems of forest management and resource extraction. Forests were thus managed under overlapping formal and informal frameworks.

Community forestry was not entirely neglected by the colonial powers and post-independent governments (Pardo 1985; Arnold 1987), but it was usually pursued through the "scaling down of forestry to the level of a village or community

[5] Fisher (2001, 3) explains that decentralisation refers to the relocation of *administrative functions* whereas devolution is the *relocation of power* away from a central point.

woodlot, which was provided through the services, or on the instructions of, government" (Arnold 1987, 124). Community forestry fell out of favour in the 1950s and 1960s when modernisation theories stressed industrialisation as the path to economic growth and conservation theories advocated the establishment of protected areas. Interest in community forestry grew again in the 1970s. In addition to the drivers discussed above, community forestry was propelled by a growing awareness of the importance of fuelwood as an energy source, a shift in development thinking that stressed rural development and basic human needs, the decline in tree stocks in the Sahelian countries and the damage caused by agriculture to soil and water after excessive forest clearance (ibid.).

By the late 1970s, the concept of social forestry had begun to gain prominence in international forestry dialogue, spurred by the World Forestry Congress held in Jakarta in 1978 with "Forests for People" as its central theme.[6] The social forestry movement was further propelled by the FAO report *Forestry for Local Community Development* released in the same year. The FAO emphasised that forest conservation and management should be devolved and local participation encouraged. As the case studies will demonstrate, community forestry programmes are now a major component of the national forest management strategies of many Asian countries. Roughly 25 per cent of forests in developing countries are owned or managed by local communities under long-term contractual agreements. This figure has doubled in the last twenty years and is likely to reach 40 per cent by 2050 (Kaimowitz 2005).

The term community forestry is used to describe "the governance and management of forest resources by communities for commercial and non-commercial purposes, including subsistence, timber production, non-timber forest products, wildlife, conservation of biodiversity and environment, social and religious significance. It also incorporates the practices, art, science, policies, institutions and processes necessary to promote and support all aspects of community-based forest management" (RECOFTC 2004). In this study, the term formal community forestry is used to describe community forestry programmes/activities that are officially recognised by the state.

The basic premise of community forestry is that communities have relevant knowledge about resource management options and if this expertise is combined with more inclusive decision-making processes the result would be more equitable and more sustainable natural resource management (Chevalier and Buckles 1999). The objective is to empower communities that have been excluded from decision making to manage and develop their resources (Means and Josayma 2002, 29). In Table 1, Elinor Ostrom has listed a set of principles that she has extracted from the rules of "long-surviving, self-governing systems" (Ostrom 1999). These principles can be used to assist the assessment of the governance traits of community forestry.

Privatisation

Privatisation was a central part of the neo-liberal economic mantra that came to prominence in influential international development organisations such as the World Bank in the early 1980s. According to this mantra, governments are generally too heavily involved in markets and the provision of services. The so-called Third World debt crisis of this period was called upon to sustain this argument. The basic argument is that the private sector is the most efficient manager of resources and governments should only be involved in instances of "market failure."

Privatisation of the forest sector can take various forms. The most common methods used over the past three decades are:

- the transfer of property rights through the sale of forest resources;
- the return of productive assets to former owners through the transfer of resource tenure, revenue ownership and management rights;

[6] Social forestry can be defined as "any situation which closely involves local people in forestry activities, for which people assume responsibility, and from which they derive a direct benefit from their own efforts" (Pardo 1985, 733).

- the transfer of use rights to private companies, communities or households, while government retains ownership of the forest resource; and
- outsourcing to the private sector of activities such as inventory, harvesting, silviculture and forest protection, with government retaining ownership and overall management responsibility (FAO 2005, 46).

In Asia, privatisation has involved entrepreneurs and communities. Both can impact on the opportunities for communities to have input into forest management.

Land tenure reform

Jenkins (2004) insists that a "historic transition in global forest tenure is currently underway." His reference is to community tenure.

Forest tenure can be divided into public and private ownership, and these categories can be further subdivided. Public ownership includes land administered by the government and land set aside for local communities on a conditional and semi-permanent basis. Private tenure can include individual and group ownership and is more secure as the state must pursue due process to withdraw the associated rights. Clearly, communities with private tenure are in a more secure position and have more options available to them than communities granted rights under public ownership (White and Martin 2002).

Without secure tenure, communities have little incentive to adopt a long term view to managing forest resources. Lindsay (2000) identified the following elements of secure community tenure, which can be used to assess tenure reform policies.

Table 1: Design principles illustrated by long-enduring common-pool resource institutions

PRINCIPLE	EXPANSION
Clearly defined boundaries	Individuals or households with rights to withdraw resource units from the common-pool resource and the boundaries of the common-pool resource itself are clearly defined.
Congruence	a. The distribution of benefits from appropriation rules is roughly proportionate to the cost imposed by provision rules. b. Appropriation rules restricting time, place, technology and/or quantity of resource units are related to local conditions.
Collective-choice arrangements	Most individuals affected by operational rules can participate in modifying operational rules.
Monitoring	Monitors, who actively audit common-pool resource conditions and use behaviour, are accountable to the user and/or are the users themselves.
Graduated sanctions	Users who violate operational rules are likely to receive graduated sanctions (depending on the seriousness and context of the offence) from the users, from officials accountable to these users, or from both.
Conflict-resolution mechanisms	Users and their officials share rapid access to low-cost, local arenas to resolve conflict among users or between users and officials.
Minimal recognition of rights to organise	The rights of users to devise their own institutions are not challenged by external governmental authorities.
For common-pool resources that are part of larger system	
Nested enterprises	Appropriation, provision, monitoring, enforcement, conflict resolution and governance activities are organised in multiple layers of nested enterprises.

Source: Ostrom (1999, 7).

- Rights are spelt our clearly.
- Rights cannot be withdrawn unilaterally or unfairly.
- Duration of rights is sufficient for the benefits of participation to be fully realised.
- Legal system recognises the obligation of the state to respect these rights.
- Rights are exclusive.
- Certainty about boundaries and membership exists.
- In the case of co-management, the government authority entering the agreement must have the clear authority to do so.
- Legalisation must recognise the holder of the rights.
- Accessible, affordable and fair avenues for seeking protection of the rights must exist.

Both privatisation and the reform of land tenure to recognise common property regimes or private ownership are treated as forms of decentralisation in this study.

Rationale for this study

We have spelt out the main drivers for the current transition in forest governance and have briefly discussed the theoretical arguments for the elements of this transition. The actual transition process and its impacts, however, have fallen well short of early expectations in some localities and countries. The following conclusions from a number of recent studies highlight this point:

> *… the seemingly constructive and favourable devolution policies have a rather mixed pro-poor impact. Counter-intuitively, such decentralisation does not always produce a genuine shift in authority to the poorest forest users. Although there have been many incremental gains for many local forest users, the policies have enabled forest departments to control forests in new ways (Edmunds and Wollenberg 2003).*

> *… the democratic decentralisation of natural resource management is barely happening (Larson and Ribot 2004).*

> *… in some cases where power has indeed been transferred, many of the abuses of centralised control have simply been shifted to local institutions (Ferguson and Chandrasekheran 2004, cited in ITTO Tropical Forest Update, 14:3 2004).*

> *There is significant evidence that a form of decentralisation that truly empowers local communities or even local governments has not occurred in many countries (Report of the "The Interlaken Workshop" on Decentralisation, Federal Systems in Forestry and National Forest Programmes, April 2004).*

Our main thesis is that there is a need for decentralisation in forest management and to re-engage communities in forest stewardship. We agree with David Kaimowitz who argues that the question is no longer whether decentralisation should happen, but what can be done to make it work better for people and forests (International Institute for Sustainable Development 2004). The same can be said of the other elements of the transition in forest governance that we have identified. The potential mutually supportive processes of decentralisation and community forestry must not be informed by theoretical prescriptions based on doctrinal views of popular participation. Political and financial imperatives to decentralise and involve communities combined with such views in part explain the mixed results of decentralisation and community forestry.

The entry point for this study is what Lindsay (2000, 35) describes as the "poor articulation between the seemingly complementary agendas of *decentralisation* and *community-based management*." Both agendas are evolving rapidly and require on-going monitoring, assessment and reflection. This analysis must examine country specifics but must also employ similar frames of reference to allow for comparison and a sharing of experiences between countries. A critical approach is required to ask why decentralisation and state planned community forestry programmes have failed to live up to early expectations. Moreover, these agendas, as Lindsay points out, should be complementary. Analysis should thus not examine

these agendas in isolation but should focus on their points of intersection to uncover ways in which they can be mutually reinforcing.

Our study places community engagement within a much broader context where we examine the roles and responsibilities of forest administrators at the central, provincial and district levels. We are particularly interested in the historical context in which the transition is taking place, as this is necessary to assess the significance of the transition and how likely future policy shifts are.

Research questions and methodology

The major research questions are:

- Is the transition in forest governance, specifically decentralisation and community forestry programmes, opening up spaces for communities to have a greater voice in forest management?
- If such spaces are becoming available, are communities able to take advantage of these to contribute to sustainable forest management and livelihoods?
- How can the decentralisation and community forestry agendas be reformed to enhance their synergies to improve forest management and reduce rural poverty?

The study consists of seven country case studies and a comparative analysis. The seven country studies were commissioned to authors with expertise in forest governance in the countries they were asked to write on. Most are nationals of these countries with considerable experience in forestry research. Non-nationals with relevant experience and expertise have also contributed to some of the country studies.

The authors were provided with a basic framework of questions to guide their description and analysis. The main components of this framework are:

- brief description of the social and economic context in which forest governance is set;
- overview of the history of forest management;
- description of the current state of forest governance and aspects of the transition with respect to policy, legislation and institutions and how these are played out at different levels (local, provincial and national);
- description and analysis of decentralisation policies and their impacts;
- description and analysis of community forestry programmes and their impacts; and
- policy recommendations.

The seven countries covered by the study are the Philippines, India, Thailand, Nepal, China, Viet Nam and Cambodia. The first four have capitalist economies while the economies of the latter three have been impacted heavily by experiments with socialism. This contrast in governance settings allows us to explore how these broad political directions impact on the prospects for community engagement in forestry and whether other factors are more significant. The following section provides a summary of the individual country studies.

PART B: **Summary of individual country studies**

India

In chapter two, Saigal, Borgoyary and Lal highlight that with the world's second largest population, a quarter of who live below the poverty line, and a rapidly growing economy, the sustainable management of India's forests is critical. Human–wildlife conflict is rising as the population expands and natural habitats shrink. Forests are under increasing pressure from poor rural communities that rely on forests resources for their subsistence; it is notable that 80% of the wood extracted from India's forests is used for fuel. The growing demands of industry for wood are also placing greater pressure on forest resources; the demand for industrial wood is roughly twice the annual allowable cut, explaining why India is one of the world's largest wood importers. The increasing and competing demands on India's forests require innovative solutions that engage local communities, not merely as the subjects of national directives, but as agents in sustainable forest management.

India has a long history of forest management that dates back to the colonial period. The state claimed control of all forests and prioritised commercial objectives. The authors point out that this resulted in forest degradation and the alienation of forest-dependent communities. India became one of the first countries to experiment with "social forestry" in the 1970s, however the objective was not to give communities greater control over forest resources. Rather, social forestry focused on establishing forests for community use on non-forest lands in order to free up existing forests for commercial exploitation. However, with the early social forestry experiment came increasing conflicts between the forest departments and local communities, prompting the government to introduce a new policy that stressed the management of forests for conservation and community needs. This led to the launching of the Joint Forest Management (JFM) programme, which is globally the most well-known system of forest management based on a sharing of responsibilities and benefits between the state and local communities. The Forest Policy (1998) clearly supports participation in forestry by calling for the creation of a massive people's movement to achieve its objectives.

JFM differs in form from state to state and, while it has created opportunities for communities to participate in and benefit from the formal system of forest management, it is troubled by a number of shortcomings. JFM is constrained by forest-related legislation that concentrates powers in the hands of the state governments; in fact, no legal backing

exists for community forestry programmes. The states are thus free to alter the terms of partnerships with the communities at will. Power relationships are asymmetrical, favouring the forest departments over local communities. In most states the forest department can unilaterally dissolve the forest protection committees that represent the communities in JFM and play a key role in the appointment of executive members to the committees. The authors indicate that there is room to further improve benefit sharing arrangements in favour of communities. Overall, they conclude that while JFM is a "step in the right direction," further devolution of powers to the community level is desirable.

Saigal, Borgoyary and Lal describe in detail the differences between JFM and the more recent Community Forestry Management programme (CFM) introduced in the state of Andhra Pradesh. The main objective of CFM is to hand over forest management rights to communities; hence, the forest department has less influence on the decisions of the forest protection committees and less control over funds. The participation of women is also required; either the president or vice-president of the committees must be a woman, eight of the 15 committee members must be women and every household that joins that committee must have a female representative. The authors note a number of positive impacts including employment generation and a greater voice for communities in implementation and policy-making. They suggest that CFM would be more effective if it was supported with a legal framework that secured community tenure and use rights.

The ongoing reform of state-sponsored community forestry in India is set within the broader context of decentralisation. The 73rd Constitutional Amendment Act (1992) was particularly important. It devolved various powers associated with the preparation and implementation of plans for economic development and social justice to Panchayati Raj Institutions (PRIs), or village councils, which function at district, block and village levels. Within India's three-tiered governance structure, the PRIs represent the lowest tier, lying below states and the central government. The aim of the Amendment was that the PRIs would act as institutions of local self-governance representing the *gram sabhas* (the general village body) and would not merely implement decisions made by the central government.

The intersection points between the broader decentralisation process and the community forestry agenda require further attention from policy makers. As democratically elected bodies that represent villages it would appear that the PRIs should play a central role in promoting community forestry. However, the authors warn that there is a danger of politicisation. Two broad messages can be taken from their chapter. First, decentralisation could contribute better to sustainable forest management by clearly defining the role of PRIs. Second, progressive examples of community forestry programmes exist in India that could be used to instruct a broader reform of JFM.

Nepal

Nepal shares many similarities with that of its South Asian neighbour with respect to the broader setting and historical processes associated with forest governance. Both countries have pursued decentralisation through legislative and administrative reform, and both share over three decades of formal community forestry. As in India, the state has made mistakes in the design of community forestry programmes, but it has learnt from these and has implemented major reforms to improve the effectiveness of community forestry as an instrument of resource conservation and rural development. The Maoist insurgency notwithstanding, numerous challenges remain to fine-tune decentralisation policies and the community forestry programme.

In chapter three Kanel points out that the rural sector remains important to the livelihoods of the majority of Nepalese. However, the average land

holding is very small and property ownership is highly skewed. This, combined with poverty that affects over a third of the population, places great strain on the country's forests: Nepal's annual rates of deforestation are amongst the highest in Asia. Kanel views governance as critical to sustainable forest management in Nepal, particularly because of caste, gender and class-based discrimination, political instability and corruption.

In a similar fashion to India, forestry in Nepal was initially based on a centralised forest administration structure that operated under the paradigm of "scientific forest management." Power was separated from traditional governance structures and vested in the forest department through the nationalisation of forests. At a similar time that India began to experiment with social forestry in the 1970s, Nepal reviewed its forest management policy. A formal community forestry programme was established and degraded lands were handed over to *panchayats*. However, the programme was compromised by the fact that the *panchayats* were not at a sufficiently decentralised level to adequately represent the interests of local communities, let alone disadvantaged groups within communities.

Kanel describes the subsequent reform of community forestry, observing that the objective of the state in engaging communities in forestry shifted from restoring degraded lands to a broader agenda that included poverty reduction and national economic development. The community forestry programme moved to a lower unit of operation – community forest user groups – and gave these groups greater authority to design, manage and benefit from community forests. Democratic governance was promoted by establishing the user groups as independent, voluntary and self-governing bodies with their own constitutions, and requiring that the user groups maintain records regarding resource use and sales. The state retains land ownership, but legislation gives full authority to user groups to manage community forests and they have perpetual succession. Although Kanel recognises that the District Forestry Office holds significant power through its right to refuse approval of the user groups' operational plans, he does not imply that the same power imbalance exists as under Joint Forest Management in some states in India. The user groups have considerable discretion with respect to the extraction and sale of forest products.

The rights entrusted to local communities have paid dividends in terms of landscape restoration and community development. Kanel provides the example of the Ghorlas community forest user group, which won a prestigious national award, as a demonstration of what community forest management can achieve. However, he explains that the governance of community forestry could be improved, and that under-representation of the poor, women and lower castes in decision-making and benefit sharing are serious issues that need to be addressed.

The passage of the Local Self-Governance Act in 1999 accelerated the broader process of decentralisation in Nepal. Strengths of this Act include measures to promote accountability and transparency and the requirement that women, the poor and lower castes must be represented in local government. Kanel points out that the Act should increase the support of local governments for community forestry, but firstly the question of how local governments will be financed needs to be settled. Further fine-tuning is required as the authorities of the Forest Department, local governments and communities overlap under the present forest management framework.

Kanel concludes that community forest management can contribute to good governance, not just of forests, but also for other sectors and to the country as a whole. He describes the forest user groups as "strong local institutions." Their activities have extended beyond forestry to include a wide variety of community development projects. In particular, their strength has been demonstrated in their ability to negotiate with different stakeholders, including the Maoist insurgents, during a period of political unrest.

Cambodia

In chapter four, Heng and Scheyvens describe the severe impacts of two decades of civil war and foreign occupation on Cambodia's forests. Corruption and fears of political instability continue to hamper Cambodia's development prospects. This is of concern in a country where life expectancy is less than 60 years and almost half the children under the age of five are underweight. Sound forest management is particularly critical as much of the rural population rely on forests for their basic needs, as an economic safety net and for income generation.

As in Nepal, rates of deforestation are very high, with the main proximate causes including illegal logging and land clearance. Underlying these proximate causes are informal networks of local, provincial and national power holders that have sought to further their advantage through forest exploitation; what Global Witness (2004) describes as "opaque patronage networks that substitute for a system of governance." Heng and Scheyvens cite a DANIDA study that traces these networks beyond the internal crises of recent decades to "a century's old tradition by which patron-client relations dominate governance and in which the public offices and the state itself are mainly seen as a tool for rent-seeking for the individual and the power-holding networks" (DANIDA undated, 6).

The authors describe the concession system that was introduced by the government in the mid-1990s at the behest of Cambodia's international backers such as the World Bank. The concession system relied upon public-private partnerships, but rather than controlling illegal logging as was intended, the concession system itself was plagued by serious breaches of contracts and unsustainable harvesting rates. The government subsequently cancelled the agreements, paving the way for the decentralisation of forest management and community forestry.

As part of its decentralisation policy the government undertook legislative and administrative reform in an attempt to establish a forest management system with both strong central authority control and decentralised decision-making at the local level. The administrative reform focused on establishing a clear line of authority from national to triage (the lowest administrative unit) level. The Statement of the Royal Government on National Forest Sector Policy adopted in 2002 identified the participation of local people in forest conservation and sustainable forest management as an important component of the policy reform. The decentralisation policy has facilitated state support for community forestry. The Forest Law (2002) describes how state-sponsored community forestry is to be operationalised and allows for communities to be granted collective tenure.

The Narktar-thmorpoun community forestry project is provided by the authors as an illustration of how community forestry can be promoted under the new legislation. A highlight of the approach taken is the emphasis that the Community Forestry Research Project has placed on local people's participation in planning, the election of representatives and decision-making. Participatory rural appraisal techniques were used to involve villagers throughout the planning process. The village elected a community forestry management committee and contributed to drafting the community forestry regulation and the community forestry management agreement. Once the community forestry management system was implemented, the management committee became responsible for finding solutions to problems that arose. Subsequently, the people in the project area established their own benefit sharing system.

The economic benefits of the Narkta-tmorpoun community forest are limited by the poor quality of the forested land that was transferred to the community. Nevertheless, Heng and Scheyvens identify a number of significant achievements of community forestry, despite its recent birth, pointing to the collaboration between the Forestry Administration and NGOs to develop community forestry legislation, policies and related documents. The authors call for the government to

develop and promote community forestry on a national scale by drawing on the assistance of NGOs, building capacity at provincial and national levels and supporting forest-related community enterprises.

Cambodia has a very short history of decentralisation of forest management and formal community forestry. It is too early to gauge the impacts of the recent legislative and administrative reforms and the full impacts of the recent experiments with community forestry. Certainly, decentralisation and community forestry will be challenged by the "opaque patronage networks" described above. Nevertheless, they are progressive steps by the government to improve forest management in a manner that provides greater options and benefits for rural communities.

The Philippines

The story of forest governance in the Philippines told by Pulhin, Ramirez and Pulhin in Chapter five is not dissimilar from that of other countries covered in this publication. Taking up from where the colonial authorities left off, the post-independence government established a centralised system of forest management oriented towards industrial production that proved incapable of managing forests sustainably. To the contrary, the forest administration was tainted by collusion between timber license holders and government officials and, when combined with the priority the administration gave to timber production over forest conservation, the results were disastrous: the Philippines became a net importer of wood; systems of weak governance were further entrenched through the practice of issuing timber license agreements to vested interest groups and individuals close to the president, and; soil loss, flash flooding and reduction of water availability became symptomatic of widespread environmental degradation. The authors stress that sustainable forest management is important to the Philippines, not least of all because one third of the population live in forested zones, including the poorest economic groups, and two thirds depend on subsistence livelihoods.

Pulhin et al. observe that "from a highly regulatory, centrally controlled and industry-biased system of forest management, forestry has evolved into a more decentralised, participatory and people-oriented approach." They place this trend within a broader transition in governance in which "a new politics of party programmes has emerged, replacing the politics of personality and patronage, and underpinning a process of consultation with actors outside the state apparatus." Their chapter provides a detailed discussion of decentralisation and community forestry as two major transitions in forest governance.

The passage of the Local Government Code (1991) and subsequent administrative/executive orders brought together the decentralisation and community forestry agendas by giving the local government units responsibility for important aspects of community-based forest management (CBFM) projects. The authors differentiate between devolution and decentralisation, describing the latter as including the transfer of power and authority, which is in line with the concept of democratic decentralisation. They conclude that regulatory power in forest management remains centralised, thereby implying that democratic decentralisation is yet to be achieved. The local government units remain subject to supervision and control by the Department of Environment and Natural Resources. They suggest that the local government units require greater autonomy, but in turn must be prepared to transfer greater authority to local communities.

The government replaced the ill-fated system of timber licensing agreements with CBFM as the main strategy for managing the country's forests. This represents a significant paradigm shift in forest management from "state-cum-corporate for-

estry" to "people-oriented forestry in the form of community-based forest management." The number of timber licensing agreements was subsequently reduced dramatically and those that remain are not eligible for renewal. A parallel can be drawn with the more recent decision by the government of Cambodia to suspend forest concessions and its search for alternative, legitimate forms of forest management such as community forestry.

The authors provide a case study of the Barobbob Watershed Occupants Association to illustrate the achievements of CBFM and some of the outstanding challenges. With the assistance of the provincial government people residing in the watershed established the Association to represent their interests. With provincial government funding the Association invested in forest protection, forest rehabilitation and livelihood generation. Reforestation and a reduction in forest fires through the efforts of the Association are positive returns on the investment made by the provincial government to establish a good partnership with the watershed community. CBFM proved a superior alternative to the provincial government's initial strategy of evicting the community from the watershed.

Pulhin et al. argue that the impacts of CBFM have also been felt at the national level. Rural communities have contributed significantly to reforestation and to reducing government expenditure on forest protection. They conclude that "of all approaches trialled thus far, it is evident that CBFM has enjoyed the greatest success in managing the forests of the Philippines." However, as with the decentralisation agenda, CBFM requires further development. Pulhin et al. highlight insecure resource use rights, including national resource use permit suspensions, as a major problem. This has caused difficulties for many communities that use their own finances to fund forest management activities. They also advocate legislation specific to CBFM as, even after four decades of formal community forestry, the present legal framework is not sufficiently stable to ensure the effective implementation of CBFM. They emphasise the importance of democratic decentralisation by calling for a strengthening of the political capacity of CBFM people's organisations and an opening up of policy making processes to ensure that the concerns of rural communities are reflected in policies that affect them.

Thailand

In chapter six Kaewmahanin and Fisher report that despite Thailand's remarkable economic growth over the past two decades, poverty remains widespread with almost one third of the population surviving on less than USD 2 per day. The development prospects of many of the rural poor depend heavily on the sustainable management of the country's natural resources.

Although Thailand is the only country in Southeast Asia that was not colonised by a European power, its governance of forests shares similarities with the former colonies: it nationalised all unoccupied forests; it used concessions as the main form of management; it centralised the administration of forests; it did not seek the participation of local people in forest management, and; it ignored indigenous knowledge systems. Kaewmahanin and Fisher explain that this system of forest administration proved incapable of managing the country's forests.

As in the Philippines, logging concessions, illegal logging and land conversion have been responsible for high rates of deforestation. Forest degradation has undermined the environmental functions of forests resulting in the depletion of soils, land, water and biological resources. Whereas in the Philippines the international market for timber was a major driver for deforestation, the authors suggest that in Thailand the international market for agricultural products explains much of the

deforestation in upland areas. In both countries, internal migration from lowland to upland areas has increased pressure on forest resources and raised demand for arable land.

With this backdrop of forest degradation, the conservation movement gained momentum in Thailand from the 1960s onwards, culminating in a national ban on logging in 1989. Kaewmahanin and Fisher suggest that the Thai Forestry Sector Master Plan (1993) was a turning point for forest governance. The Master Plan questioned the centralised manner in which the state was managing forests and by the end of the 1990s Thailand's national development plans were calling for the participation of local people in resource management. The government shifted its objectives of forest management from a narrow focus on production to a balance between conservation, rehabilitation and production, including the development of local livelihoods. Thailand's "people's Constitution", enacted in 1997, gives communities the rights to manage and maintain the sustainable use of forest resources.

In practice, however, the forest department sought to rapidly expand the coverage of protected areas without consulting forest dependent communities, resulting in widespread conflict. Kaewmahanin and Fisher argue that many forestry officials continue to blame deforestation on local people and, rather than working with communities to find solutions, have sought to bar local people from utilising forest resources. Thailand's response to deforestation was thus quite different from that of the Philippines. Whereas the Philippines saw people's involvement in forest management as crucial to halting deforestation and rehabilitating degraded lands, the Thai government saw monocrop plantations and protected areas that kept people out of forests as the solution.

Despite, and perhaps because of, this predominate attitude within the forest department, a popular community forestry movement emerged. However, despite a decade and a half of lobbying, no community forestry legislation exists. The authors describe a convoluted process to develop a community forestry bill, which appears to have been tainted by political interests and hindered by disagreements between "dark green" and "light green" conservation groups; the former are heavily conservation oriented while the latter balance conservation with human rights and human development concerns. They also describe efforts that have been made by the forestry administration to promote people's participation in forest management, but conclude that on balance "participatory and collaborative forest management projects in Thailand do not involve the devolution of decision-making power."

The co-management and community forestry models that are presently being trialled are set within the broader context of decentralisation. As in Nepal and the Philippines, power and authority have been devolved to local governments. The establishment of *Tambon* administrative organisations, which are responsible for local development planning and implementation, would appear to hold promise for democratic decentralisation as their councils include elected members and village representatives contribute to the planning process.

Kaewmahanin and Fisher present the Pred Nai community mangrove forest as a case study to illustrate the potential for community engagement in forestry. The mangrove forest adjacent to the community was degraded over many years because of concessions and resource extraction by local people. The Pred Nai villagers were successful in stopping the logging and undertook restoration activities such as tree planting. The authors describe how the villagers expanded their local initiative into a broader "people's movement" by constructing networks with other communities and involving politicians, academics and government officials. The immediate impacts included an improvement in livelihoods and the condition of the mangrove ecosystem. A broader impact was the catalysing of a community-based mangrove management movement in eastern Thailand. The authors explain that disagreement existed within the community regarding how the mangrove should be managed, but that the community was able to resolve this in a democratic fashion. Two major lessons can be drawn from this case study: 1) involving local communities in forest manage-

ment is more effective than centralised, regulatory management that seeks to exclude local people from forests, and 2) forest management improves when a broad range of stakeholders collaborate in seeking solutions to forest degradation. However, they conclude that while a strong civil society movement promoting community action and conservation provides community forestry with strength, the absence of government support remains a major constraint.

Viet Nam

In chapter seven, Do Dinh Sam, Hoang Lien Son and Le Quang Trung point out that like its Thai neighbour Viet Nam has enjoyed high economic growth rates over the past decade and a half. These have contributed to poverty reduction, but the expanding economy has also increased pressure on Viet Nam's forest estate.

Viet Nam experienced high rates of deforestation and forest degradation after independence through land conversion, timber felling for industrial purposes, fires and the use of "Agent Orange" by the US military during the second Indochina War. Although total forest cover increased from the mid-1990s onwards because of the state's ambitious plantation programme, natural forests continue to be degraded.

While the governance superstructures of both states are very different – Thailand is governed by a constitutional monarchy, whereas Viet Nam is a socialist state - their history of formal forest management shares much in common. Both developed hierarchical, centralised systems of forest administration, however, when faced with the inability of these systems to control forest degradation, they implemented wide ranging decentralisation policies.

Prior to colonisation forests were managed by ethnic communities employing traditional management systems. As in most other developing countries of Asia, the state nationalised forests after independence and prioritised production over other forest management objectives in order to increase the contribution of forests to the country's economic base. In Viet Nam, the hierarchical forest management structure established by the socialist government perhaps penetrated further into the social fabric than in the non-socialist countries covered in this publication. In non-socialist countries, the administration of forests generally extended as far as the district forest office. In Viet Nam, forest administration extended to the farmer's associations, women's union, youth brigades and other local social units fabricated by the state. Compared to the Philippines and many other countries in South-east Asia, the socialist government did not use concessions as the primary form of forest management; rather, the government took charge of the management, exploitation, processing and distribution of forest resources and operationalised these tasks through collectives.

Several reorientations in forest management took place after the economic reform measures known as Doi Moi and the National Forestry Action Plan (1991) were formulated. These included 1) a widening of the objectives of forest management to include protecting and establishing forest resources, 2) a transition from the state and collective as being the main actors in forest management to the involvement of many economic actors, 3) decentralisation, and 4) people's participation. The authors detail the institutional, legal and regulatory reform that the state introduced to implement these reorientations. Because of these reorientations, over two million hectares of natural forests and 700, 000 hectares of plantation forests are now managed by households and collectives.

The authors describe the roles and responsibilities of different actors in forest protection management to illustrate the extent of decentralisation. At the district level, a board manages the protection forests through an annual action plan. The action plan must be approved by the district people's

committee and is informed by the opinions of the social units that are contracted under the plan. Households and various unions, such as the farmer's union, act as the contractors. The board is funded through the provincial budget, but has the autonomy to organise business activities. The authors conclude that decentralisation has provided greater space for self-governance by increasing the forest management roles ascribed to the provinces, districts and communes. The provinces can propose forest management plans to the central government and take responsibility for their implementation. Communities are also able to develop village regulations for forest management appropriate to their specific circumstances.

Do Dinh Sam, Hoang Lien Son and Le Quang Trung describe and analyse contemporary forest management in Phu Loc district to illustrate the changing face of forest governance at the local level. They describe how the "interests of the colonists had replaced local interests in forest management" and how the forest management system developed by the post-independence government continued to ignore traditional management practices. Consequently, local farmers resorted to commercial tree feeling and forest clearance for agriculture. Doi Moi brought with it positive changes for forest management in the district. Over 10,000 ha of forestland were allocated to communities, households and individuals, which stimulated forestry activities: "within five years one thousand hectares of bare land in the district were planted in fruit trees and industrial species."

The authors describe several deficiencies in the new contract system that led to a process of multi-stakeholder dialogues to find more effective forest management options. A benefit sharing mechanism was proposed and trialled in three communities. The communities were given the freedom to establish village regulations, drawing on traditional customs and state laws and regulations, and to propose action plans and benefit sharing arrangements for the management of natural forests. The positive impacts of this flexible approach were improved forest protection, an increase in timber growth rates, and income generation for the resident communities. Community forestry received a boost at the national level under the revised Law on Forest Protection and Development enacted in 2004, which describes the role of community forestry and regulations on community forest allocation.

Based on the Phu Loc experience the authors conclude that "providing space for community forest management at the village level is especially important as it builds the solidarity of the community, optimises benefits for the community and develops the culture and community identity of people whose lives are linked to forests." They recommend the further expansion and strengthening of flexible co-management approaches, such as those developed at Phu Loc.

China

Chapter eight traces the history of forest management in another socialist country – China. Partly because of the boom of its domestic manufacturing industries, China is now the world's largest importer of tropical timber; its influence on the state of forests in developing countries of Asia is immense.

The chapter is divided into two parts. In part one, Hirano provides a detailed account of the evolution of forest management since the foundation of the People's Republic of China in 1949. In part two, Seki and Xiang illustrate the shortcomings of the state's mass mobilisation strategies for forestation in their analysis of *Tuigeng huanlin* (Land Conversion Programme from Farmland to Forest).

Although significant regional differences exist in forest type and management, Hirano argues that forest management over the entire country was shaped by state building and policy implementation along socialist principles. He places his analy-

sis within the broader context of a shortage of forest cover to supply domestic needs and fulfil environmental functions.

Unlike other countries formed in the early decades after the Second World War, China did not prioritise commercial objectives by promoting large-scale tree harvesting. It viewed the environmental functions of forests, e.g., mitigating flooding and contributing to sedentary agriculture, as important for rural development and social stability. However, an ineffective land reform policy led to a "scramble" for forests and widespread felling.

Forest management took on greater political overtones in the second five year plan when the state sought to employ forestation as a means to demonstrate the effectiveness of collective action. The central government prescribed the creation of a variety of local units/collectives to which it transferred most forest ownership and management, with the intention of mobilising millions of people for forestation and forest preservation. True to the tenets of a planned economy, the government took charge of timber production and distribution in order to promote other industries.

Hirano describes the destruction wrought on China's forests in the subsequent period of nation building, the "Great Leap Forward", when forests were expected to supply the rapidly expanding steel industry with fuel. During this period communes were established as larger organisational units than the collectives and were made responsible for forest management. The ownership of forestlands and trees was completely collectivised and any vestiges of traditional management and private ownership were erased. In the following period of "adjustment", the state sought a more balanced approach than mass mobilisation; many commune farms were decentralised with forestry functions being transferred to lower organisation units, such as production teams and brigades. Overall, however, the centralised nature of forest administration was reinforced by a policy of specialisation.

The 1950s to 1970s is described by Hirano as a period in which forest management at the local level was gradually embedded in collective units that were built and reorganised in tune with the models of state building that were devised. In reviewing this period of forest management, Hirano highlights two major problems of governance: 1) while the state made forestation and forest conservation major objectives of forest management and set up administrative structures and regulations accordingly, in practice it felt compelled to allow the unsustainable felling of trees to meet the increasing demand for wood, and; 2) forest management was hampered by dramatic changes in state building policies.

A major change in forest management with respect to use rights and ownership came soon after the state introduced economic reforms in the early 1980s. Some similarity can be found with the reforms that were implemented in Viet Nam under *Doi Moi*. In both Viet Nam and China private actors joined the forest departments and the collectives as forest managers. Both the state and collectives could now contract out forest management to private actors by granting land-use rights and tree ownership. Foreign companies invested in forestry after further reforms were introduced in the 1990s. Despite this apparent movement towards pluralism, Hirano describes top-down planning as an enduring feature of forest management, noting the "Big-Six Special State Projects for Forestry" launched in 2001 and further regulations to control forest use that were introduced after the liberal reforms of the 1980s.

Hirano concludes his analysis by identifying a definite need for the decentralisation of forest management: "While integrated projects and numerical goals are sent down to the local level, it is difficult for the local government and organisations to implement their own activities that take better account of regional specifics." Hirano describes how this centralised management has been successful in doubling forest cover, but has resulted in poor transparency and accountability and a lack of enthusiasm for forestation amongst local people. The relatively small number of domestic NGOs promoting forest conservation also constrains forest governance.

The decentralisation Hirano calls for has two basic components. First, opportunities for local society, including local governments, units and people, to contribute towards sustainable forest management must be created. Second, financial and organisational support must be provided to local society to take advantages of these opportunities. Hirano's thesis is that the state should not merely devise more types of local units and forest management frameworks to devolve authority to in a top-down fashion. Instead, decentralisation policies must encourage endogenous initiatives to manage forests and be sufficiently flexible to support these in an effective manner.

In part two of chapter eight, Seki and Xiang illustrate how the structural problems of China's forest management that are described by Hirano are manifested at the local level. They analyse the impacts of *Tuigeng huanlin*, the world's largest afforestation programme, on local attitudes and livelihoods through household surveys and interviews with key informants.

Tuigeng huanlin was devised by the state after the devastating flooding of the Yangtze River in 1998. The objectives of the programme appear commendable: to convert agricultural land into forest or grassland to prevent soil erosion, alleviate flood damage in high-rainfall areas, and stem the progress of desertification in arid areas. In order to encourage participation in the programme, the government offers compensation for a limited period to farmers who retire land. However, Seki and Xiang describe the difficulty farmers have in establishing alternative livelihoods and regulations that restrict them from gaining an economic benefit from the plantations (e.g., no intercropping is permitted). Their conclusion is pertinent:

> *The forest land in a Chinese village is supposed to be managed collectively under collective ownership. This is the distinct advantage of China's forest governance compared with other developing countries where the forests are owned by the state. In Tuigeng huanlin, however, the government is trying to control and regulate the villages' land under top-down national strategies.*

China appears to have policies and organisational units to promote decentralised forest management. Moreover, China's system of collective tenure should encourage community involvement in forestry. In practice, however, the collectives appear to have become instruments for extending the reach of the state into local society. Seki and Xiang agree with Hirano that the state should invest greater trust in local communities and encourage them to express their concerns and ideas for more appropriate forest management strategies.

From the brief summaries provided above it is clear that, while difference exist in the policies and impacts of decentralisation and formal community forestry in the seven countries, they share a number of broad messages. The final part of the introductory chapter attempts to tease out these common messages through a close reading of the individual country studies.

PART C: **Synthesis of observations and messages from the seven country studies**

The following observations and messages are drawn from the wide-ranging discussion and analysis in the seven country studies. They highlight the progress that has been achieved in the decentralisation of forest management and state support for community forestry, as well as the shortcomings of current policies, and suggest ways of reshaping the decentralisation and community forestry agendas to more effectively promote sustainable forest management.

1 The nationalisation of forests, the establishment of centralised forest administration structures, the focus of forest management on production and faith in the scientific forestry paradigm characterised forest management in the study countries until recent decades. Production to supply domestic industries or to bring in foreign exchange was generally prioritised over other objectives of forest management. These policies were all oppositional to community participation in forest management.

2 The centralisation of forest management was established through a tiered administrative structure under which decisions made at the centre (ministry or department) were passed down to lower administrative levels (province and district). In the socialist countries (Viet Nam and China) a variety of organisational units were established at community level, such as brigades, teams, unions and collectives, to ostensibly encourage people's participation in forestry. However, they became vehicles of the state planning apparatus and were used to implement decisions made by the central government.

3 Concessions were introduced as the main form of forest management in Cambodia, Thailand and the Philippines. They had devastating environmental impacts and further entrenched systems of weak forest governance. In the socialist countries, governments set production targets for the state forest enterprises based on predicted demand, rather than on estimates of forest capacity. Although the primary objective of China's forest management policy has consistently been to increase and preserve forests, at different periods it has allowed unsustainable harvesting to meet subsistence needs and set unsustainable targets for the state forest enterprises to provide cheap timber for domestic industries. Industrial and revenue concerns dominated forest management in India, resulting in widespread forest degradation and the alienation of forest-dependent communities.

4 Wide-ranging decentralisation policies were introduced by all of the study countries, though significant variations exist in timing and form. Decentralisation was introduced first by China in 1978 when people's communes as an organ of the Communist Party began to be

phased out. Viet Nam introduced decentralisation policies in 1986 as part of its package of economic reforms known as *Doi Moi*. In both China and Viet Nam, a major objective of decentralisation was to encourage economic participation by private entrepreneurs and foreign investors. Decentralisation policies were introduced by the Philippines, Nepal and Thailand in the 1990s through legislation that devolved responsibilities to local authorities. India amended its constitution in 1992 in order to establish democratically elected institutions of local self-governance. Decentralisation was introduced later by Cambodia, which held its first commune elections in 2002.

5 In some countries the decentralisation of forest management had begun before decentralisation became a major state policy objective. For example, Nepal, India and the Philippines were all experimenting with various types of formal community forestry in the 1970s, two decades before legislation giving greater authority to local governments was introduced. Nevertheless, the decentralisation of forest management was an important component of the broader decentralisation policies of the study countries. Decentralisation legislation gave local governments greater responsibilities for natural resource management (e.g., the Local Self Governance Act (1999) in Nepal, the Local Government Code (1991) in the Philippines, and the Tambon Administrative Act (1994) and the Decentralisation Act (1999) in Thailand). In China and Viet Nam, decentralisation provided opportunities for private actors (households and companies) to participate in forest management. In China, the "forest production responsibility system" introduced in 1980 gave private actors the right to manage state-owned and collective forestlands, and the "family mountain" system gave farming households tree ownership to meet their daily needs. In Viet Nam, decentralisation extended to the commune level, where the people's committees were given responsibility for forest protection and development, and forestland utilisation in the area of the commune. In India, Joint Forest Management was the primary manifestation of the decentralisation of forest management.

6 The extent and impacts of decentralisation have been limited by unstable and unpredictable policies caused by changes in political leadership; the desire of higher level forest administrators to retain the status quo that provides their influence; a lack of confidence amongst foresters in the ability of local communities to manage forests; the reluctance of administrators to transfer the necessary resources and authorities for local agencies to undertake their newly devolved duties; the manipulation of the decentralisation process by local elites for their own advantage, and; a lack of awareness of rights and responsibilities at the local level.

7 In all seven countries decentralisation is incomplete when viewed from the perspectives of *pluralism*, *subsidiarity*, *empowerment* and *social capital*. With respect to *pluralism*, further reform is required in some countries to encourage participation in forest management by a broad range of stakeholders. *Subsidiarity* is not fully realised in the Philippines and in other countries where the authority devolved to local government units overlaps with the authority claimed by the central state organs (ministries and departments). In many countries the *empowerment* of district forest offices to carry out their newly devolved duties through the transfer of resources and human resource development requires further attention. Communities do not always have sufficient *social capital* for sustainable forest management, but decentralisation has fallen short in providing support to build community capacity.

8 Incomplete decentralisation can lead to unreasonable restrictions and uncertainly for communities. Unreasonable restrictions on access to forest products may be imposed by central governments that are not sufficiently in touch with local realities. Moreover, the decisions of local governments may be over-ruled by higher authorities that are not familiar with local circumstances. Examples include rulings made by the Supreme Court in India that have restricted the space for local management and the cancellations of Resource Use Permits in the Philippines by the Department of Environment and Natural Resources (DENR). Local people residing in the

Barobbob Watershed in the Philippines could not cut the trees they had planted because the DENR would not issue cutting permits, which contradicted an earlier agreement the community had negotiated with the provincial government.

9 Contradictory policies will also most likely exist when decentralisation is incomplete. In Nepal, confusion has arisen because the forest user groups are legally recognised as independent, self-governing organisations charged with the responsibility of managing community forests, yet the local government units have been given control of all natural resources in their administrative area through the Local Self-Governance Act (1999). Moreover, under the Forest Act (1993) the central government can directly transfer forests to local communities, undermining the authority given to local governments by the Local Self-Governance Act. India, too, is troubled by different messages delivered by the Forest Policy (1988), which is supportive of participatory forestry, and the Forest Act (1927), which centralises most powers in the hands of the state.

10 Decentralisation can result in conflicts between competing interest groups, but it also creates opportunities for new alliances to promote rural development and forest management. Thailand provides an example of conflict where "dark green" conservation groups have found themselves together with the forest department in opposing "light green" groups that are advocating for greater community participation in forestry. Conflicts are to be expected when authority is devolved; hence, conflict-resolution mechanism must be built into the decentralisation process.

11 Despite the shortcomings of current policies, decentralisation has provided opportunities for state-sponsored community forestry programmes and is necessary for governments to provide effective support for community forestry. Local governments are in a position to have closer and more frequent contacts with communities, which provide them with a better understanding of community needs, expectations, social capital and resource constraints. Democratic decentralisation is needed to provide communities with structures through which their concerns can be reflected in official policies and everyday decision-making of the district and provincial forest offices.

12 The increase in the number of people participating in forestry and the area of forests managed by communities since decentralisation policies and community forestry programmes were introduced has been dramatic. Thirty-five per cent of the population of Nepal are members of the forest user groups; in the Philippines, the government has handed over five million hectares of forestlands to communities under long-term lease agreements, and; in India, over 17 million people participate in Joint Forest Management. In China and Viet Nam, millions of people participate in formal forest management as individual households or as members of associations/collectives. The numbers of formal participation in community forestry are lower in Thailand, which has no legal framework for community forestry and where the relationships between the forest department and communities are often conflictual, and Cambodia, which has only recently included community forestry in its forest management strategy.

13 Fundamental differences exist in the approaches taken by the non-socialist and socialist countries to encourage local participation in forest management. The non-socialist countries have generally established nationwide community forestry programmes supported by regulatory frameworks and accompanying guidelines. These prescribe the type of social organisations that must be established to manage the community forest, but they do provide some space for communities to decide how forests will be managed by requiring them to develop and implement their own community forest management plans. Paradoxically, the socialist countries, which were formerly associated with centrally planned economies, may have devised a wider variety of social arrangements for local people to participate in forestry. Viet Nam and China support forest management not only by communal bodies, but also by individual households. In China, collectives continue to manage forests, but are increasingly transferring responsibilities and rights to households under the "forest production responsibility system." In

Viet Nam, households and various community-level associations are participating in production and protection and special-use forests as contractors, and are involved in long-term forest leasing. The seemingly more flexible approach adopted by China and Viet Nam to promote participation in forest management could provide instruction to other countries.

14 Commonly, community forestry programmes are characterised by co-management involving the forest department and local communities, renewable long-term lease agreements that define management and use rights, and some form of benefit sharing between the state and communities. It is rare for the state to transfer land ownership to communities and property rights are usually restricted to the ownership of trees and forest products. China, where collectives own over half of the nation's forestlands, is an exception.

15 As with decentralisation, the impacts of the community forestry programmes in the study countries have been mixed, but the country studies indicate that community forestry can deliver significant environmental, social and economic benefits.

16 Further reform is needed to develop legal frameworks that institutionalise community forestry and provide communities with secure tenure. Unsecured access and use rights discourage long-term community investment in forestry. In most Indian states Joint Forest Management is based on administrative orders that can be withdrawn or changed at any time and governments can unilaterally dissolve the community-based forest protection committees. In Thailand, the community forestry bill has a chequered fifteen year history and the lack of a legal framework explains why community forestry is represented by uncoordinated projects, rather than a comprehensive national programme. The community-based forest management programme in the Philippines also suffers from the lack of an adequate legal framework. This has allowed for the national suspensions of Resource Use Permits, which has reduced community confidence in the programme. In China, people had little faith in government guarantees of forest-related rights because forest management went through many turnarounds associated with the politics of the Chinese Community Party. Forest policy has become more stable since the introduction of the household responsibility system.

17 A variety of benefit sharing arrangements can be found in the seven study countries. Under the community forest programme in Nepal user groups must meet all the costs of forest management, but also retain all of the benefits. In contrast, in Viet Nam separate regulations for protection and production forests clearly spell out the types and volumes of non-timber and timber forest products that contractors, which can include various community associations and households, are eligible for.

18 Benefit sharing arrangements must provide sufficient incentives for communities to invest in forest management. There are many examples in which communities are given responsibilities for protecting forest resources, but insufficient use rights to encourage their participation. Under some existing arrangements communities are only provided with management rights for degraded land, their use rights are insecure, their access to commercially valuable timber and non-timber forest products is unjustly restricted and/or regulations prohibit legitimate livelihood activities on forestlands. There has been a reluctance to transfer the most valuable forest resources to communities. For example, in Viet Nam most of the production natural forests that contain valuable forest products remain under the management of state forest enterprises; in India, Joint Forest Management is directed at degraded areas, and; in Nepal, there is no incentive for communities to protect trees under the leasehold forestry programme as ownership is retained by the Department of Forests.

19 Both the costs and benefits of community forestry must be shared equitably. In Nepal, the poorest villages are often expected to take on a disproportionately large burden in providing labour for community projects, yet receive the

least benefits. The closing of community forests in Nepal also denies access to those who need them most. In India, forest closure and the removal of "encroachers" on forest land under Joint Forest Management has placed a disproportionate burden of the costs on weaker sections of the community. In China, rural inequality has increased because richer households have benefited more from the household responsibility system of forest management than poorer households.

20 Each of the study countries has developed regulations and guidelines for establishing community-based forest management groups (e. g., forest protection committees in India, forest user groups in Nepal, people's organisations in the Philippines) or has sought to recruit existing groups for forest management (e.g., people's committees in Viet Nam and collectives in China). The achievements of these groups have been significant and extend beyond forestry to broader community development. For example, in Nepal the community forest user groups generated an income of more than Rs 747 million in 2002, of which they spent about one third on community development activities. The forest user groups are strong local institutions that have promoted good governance through their ability to negotiate with different stakeholders, including the Maoist insurgents, during a period of political unrest.

21 To promote community forestry, forest departments have generally preferred creating and implementing standardised organisational models for uniform application over utilising existing, "natural" organisations. However, establishing democratic, transparent and accountable community-based forest management organisations has proved challenging. Where effective local arrangements exist, community forestry regulations should be sufficiently flexible to take advantage of these.

22 Nevertheless, communities may have insufficient social capital for equitable forest management as their existing decision making processes may be undemocratic and may not lead to desirable outcomes for weaker social groups. They may not have sufficient checks and balances or knowledge to manage natural resources sustainably in a context of rapid economic and social change associated with increased opportunities and pressures. If communities are treated as homogenous social units in the design of community forestry programmes, weaker social groups will benefit least, or worse, may suffer. Flexibility to use and build upon existing social arrangements is desirable, but controls are required to ensure that community forestry is equitable and sustainable. In the study countries various controls exist that limit the types, volumes and locations of forest products that communities have access to. A multi-stakeholder process to decide these controls that is informed by an understanding of ecosystem dynamics is desirable.

23 The importance of the participation of weaker social groups in forest management has been recognised in some countries that have introduced regulations to improve their representation. For example, in the Community Forest Management programme implemented in Andhra Pradesh, India eight of the fifteen members of the management committee must be women and either the vice-president or president must be a woman, while in scheduled areas (tribal areas) all members of the managing committees must be scheduled tribes or castes.

24 Measures to build the confidence of weaker social groups in forest management are required as they may be reluctant to speak out at forest management group meetings and/or may not have the time to attend, and as more influential members may not be interested in their opinions. Despite efforts to improve the representation of women, lower castes and the poorest villagers in forest user groups in Nepal, they have found it difficult to have their concerns represented in deliberations.

25 The national forest management strategy should encourage spontaneous community initiatives to promote sustainable forest management. Communities are discouraged from showing initiative when the state seeks to unilaterally direct all aspects of forest management. In China, despite the reforms to encourage house-

hold participation in forestry, the government continues to design massive forestation programmes without seeking input from the people who are most affected. Consequently, the programmes do not reflect local concerns adequately and do not provide space for communities to enhance their effectiveness and sustainability through spontaneous initiatives.

26 Building trust between communities and forestry officials is critical for community forestry to succeed. In China, forestry officials appear to doubt that local people have the knowledge to manage forests, while in the Philippines and Thailand it is common to blame deforestation on local communities practicing swidden agriculture. In Cambodia, foresters do not have sufficient knowledge and experience to support community forestry at the local level as formal community forestry is relatively new. Foresters require training to be facilitators, not merely regulators, and to be able to assess the merits of knowledge and management systems other than those that stem from "scientific forestry."

27 NGOs are playing important roles in promoting community forestry as activists and facilitators. Foreign donors have also channelled funds to propel community forestry forwards. In some countries (e.g., Cambodia) the relationships between NGOs and governments are often strained, but community forestry has benefited when governments encourage responsible NGO involvement. For example, in Andhra Pradesh, India over 250 NGOs have been formally involved in implementing Joint Forest Management and have improved communication between the government and local people. In other instances, donors have concentrated funding in small project areas leading to a geographical imbalance in the progress of community forestry. While encouraging the participation of NGOs and donors in community forestry, governments must not lose control of the forest management agenda.

28 The links between community forestry and rural poverty reduction must be augmented. A high proportion of the populations of the seven study countries is rural, many of whom are poor. Forests will continue to play important roles in the subsistence and cash economies of rural communities, and provide an important safety net: 80% of wood extracted from India's forests continues to be used as fuel, while in Cambodia about 90% of the population relies upon wood or charcoal for fuel. The initial objectives set for community forestry were to rehabilitate degraded land or establish new forests. However, the country studies show that community forestry can also contribute to livelihoods through income generating activities and resource conservation. Options to promote pro-poor community forestry include involving the poorest households in income generating activities using low-interest loans from the management group funds and setting aside part of the community forest for poorer households.

29 There is a need to empower communities through awareness raising of the rights and responsibilities associated with decentralisation and community forestry policies. In Nepal, the Federation of Community Forest Users believes that legal awareness programmes are needed to reduce the dominance of forest user groups by the elites and to encourage participation of the poor, women and disadvantaged groups. In Cambodia, many of the local communities who live in and near forests do not have a clear understanding of the Sub-Decree on Community Forestry and related laws and regulations.

30 Systematic monitoring and feedback of community forestry which is built into an adaptive learning approach that involves the forest department, communities and third parties is required. The Community Forestry Programme in Andhra Pradesh, India appears quite advanced in that monitoring is conducted by a number of committees that include foresters, NGOs, the head of the *panchayat* and the village school headmaster/headmistress.

The above observations and messages involve a necessary degree of generalisation. The individual country studies that follow provide greater detail of country specifics regarding the evolution of their community forestry and decentralisation agendas.

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Acknowledgments: The authors would like to thank Dr. Pooja Sawhney (IGES) for her insightful comments on an earlier draft of this chapter.

2

FOREST GOVERNANCE AND PARTICIPATORY FORESTRY IN INDIA

Sushil Saigal, Mamta Borgoyary and Pankaj Lal [1]

[1] NRM Winrock International India (sushil@winrockindia.org).

Introduction

India presents a compelling country in which to examine the evolving state of forest governance. It is noted for its early experiments in social forestry and the programme of Joint Forest Management that emerged from these. A process of decentralisation of forest governance has raised new sets of challenges that require attention. This paper begins by presenting a brief overview of the socio-economic profile and the state of forests in India. The history of forest management is traced and the emergence of the formal participation of local people in forest management is highlighted as a turning point. After describing the present state of forest governance and forest-related legislation, the paper turns to the progress and challenges associated with the efforts to decentralise forest governance. The Joint Forest Management programme is discussed and the need to further devolve power to the community level is emphasised.

Participatory forest management and its various manifestations in the state of Andhra Pradesh are addressed as a case study. Significant gains, such as increases in forest cover are noted, but problems remain, not least of all the asymmetrical power relationships that favour the forest department over local communities. Based on this discussion, a list of policy recommendations for good forest governance in India is presented.

Socio-economic context and status of forest resources in India

India: Geographic and socio-economic profile

Set apart from the rest of Asia by the Himalayan mountain range, the Indian subcontinent touches three large bodies of water: the Bay of Bengal to the east, the Arabian Sea to the west, and the Indian Ocean to the south. It is the world's seventh largest country with a geographical area of 329 million hectares. India is comprised of four regions: the great mountain zone (Himalayas), the plains of the Ganga and Indus, the desert region and the southern Deccan Peninsula. The two main island groups in India are the Andaman and Nicobar Islands in the Bay of Bengal and the Lakshadweep Islands in the Arabian Sea.

Due to the diverse geographical and climatic conditions, a large variety of flora and fauna is found in the country. India is one of the twelve mega-biodiversity countries in the world. Forest types range from alpine forests in the Himalayas to rain forests in the Western Ghats. Land degradation and pollution are the major environmental challenges facing India. According to the National Forestry Action Programme (NFAP), more than half of India's land area, an estimated 175 million hectares (53.24 %), is subjected to different types of land degradation (GoI 1999).

India is a democratic republic with a federal structure, consisting of twenty-eight states and seven union territories and follows a three-tiered governance structure. There are democratically-elected governments at the central, state and district levels. The Panchayati Raj Institutions at the district, block and village levels constitute the third tier of government. The powers and responsibilities of different levels are defined in the country's constitution.

India supports more than sixteen per cent of world's population with only 2.5 per cent of the world's geographic area. According to the Census of India 2001, the population of India is 1.027 billion, of which the majority is rural (72.22%). The population density is 324 persons per sq. km. There is a large spatial diversity in population density varying from thirteen persons per sq km in Arunachal Pradesh to 904 in West Bengal.

The government of India (GoI) estimates that the percentage of the population living below the poverty line has declined sharply in the past thirty years from 55% in 1973-74, to 36% in 1993-94, and 26% in 1999-2000 (GoI 2002). However, the absolute number of poor people has not dropped significantly due to the countervailing growth in the population. The Economic Survey 2001-02 estimated that about 260 million people were living below the official poverty line. The poverty level can be further gauged by the fact that twenty-one per cent of the total population is undernourished (UNDP 2004). There is high variation in poverty among the states – while only 4.4% and 6.16% of the population in Goa and Punjab, respectively, was living below the poverty line in 1999-2000, the corresponding figures for Orissa and Bihar were as high as 47.15% and 42.60%, respectively (GoI 2002). India ranks 127th in the Human Development Index, with a Gross Domestic Product (GDP) per capita of US $ 2,670 (Purchasing Power Parity basis). However, there are major inter-state differences.

The existing state of forest resources

Officially, forestry is the second major land use in the country after agriculture. Around twenty-three per cent of the country's area (75.67 million ha) is officially classified as forest land (Table 1). In many parts of the country, however, the complete legal process for declaring an area as forest land has yet to be completed after the required settlement of the rights of their pre-existing occupants, if any.

However, as shown in Table 1, the actual forest cover is less than the recorded forest area. While

Table 1: Area of forests by category

CATEGORY	AREA (MILLION HA)	PERCENTAGE OF TOTAL GEOGRAPHICAL AREA
Total geographical area of India	328.73	100.00%
Officially recorded forests	76.84	23.38%
Actual forest cover	67.55	20.55%
Dense forests	41.68	12.68%
Open forests	25.87	7.87%

Source: FSI (2001)

Note: 'Actual forest cover' are lands having at least 10% crown cover; 'dense forests' are forests with over 40% crown cover; and 'open forests' are forests with crown cover between 10 and 40%.

some of the forest lands lack tree cover because of geography, for example, wetlands and snow-covered peaks, a significant proportion is degraded.[2] The existing forests are not uniformly spread throughout the country but are concentrated in a few regions, such as the Himalayas, northeastern states, central India and the Western Ghats.

The officially recorded forest lands in India are broadly classified into reserved, protected and unclassed forests, though there are several other site-specific categories in different regions (Figure 1). In addition, there are other overlapping categories of protected areas. There are eighty-seven national parks and 485 wildlife sanctuaries in the country with a total area of 4.06 million hectares and 11.54 million hectares, respectively. There are twenty-three tiger reserves spread over 3.30 million hectares that have been created under "Project Tiger". In addition, there are eleven biosphere reserves with an area of 4.76 million hectares. These are a set of unique ecosystems identified as a landscape unit on the basis of their biodiversity, naturalness and effectiveness as a conservation unit (FSI 1999).

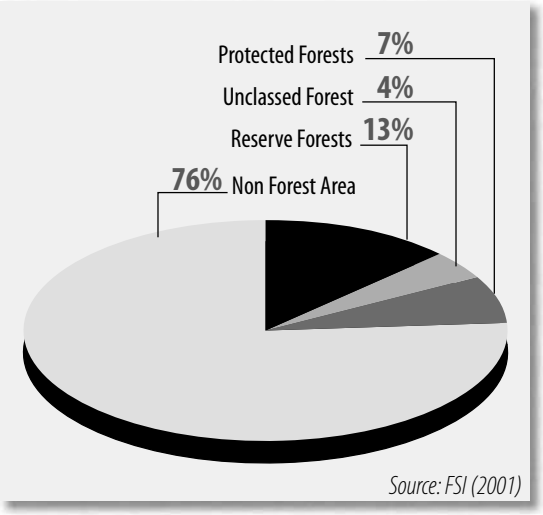


Figure 1: Distribution of recorded forest area

According to official estimates, about 93% of the forest area in the country is controlled by the forest department (FD)[3] and 4% by the revenue department. Corporate bodies and communities own 1.5% of forests, while private forests comprise a mere 1.5% of all forests (ICFRE 1996).

The productivity of Indian forests is significantly below the regional and global average (Table 2). In terms of demand from forests, fuelwood is by far the most important product extracted from India's forests. Of the total demand for wood in the country, 80% is just for fuelwood. Demand for industrial wood, which includes all wood other than fuelwood, was estimated to be between 50 and 65 million m^3 in 1996, against the annual allowable cut of 26-27 million m^3. Bamboo is another important forest product that has many uses in both industries and households (Saigal et al. 2002).

Besides supplying timber and fuelwood, forests are an important source of sustenance for the poor and marginalised communities. Forests provide livelihood support to a significant proportion of the population, especially marginalised tribal and other vulnerable groups. There are an estimated 147 million people living close to officially designated forest lands in over 170,000 villages (FSI 1999), and there is a clear overlap between the forest, poverty and tribal maps of the country (Map 1).

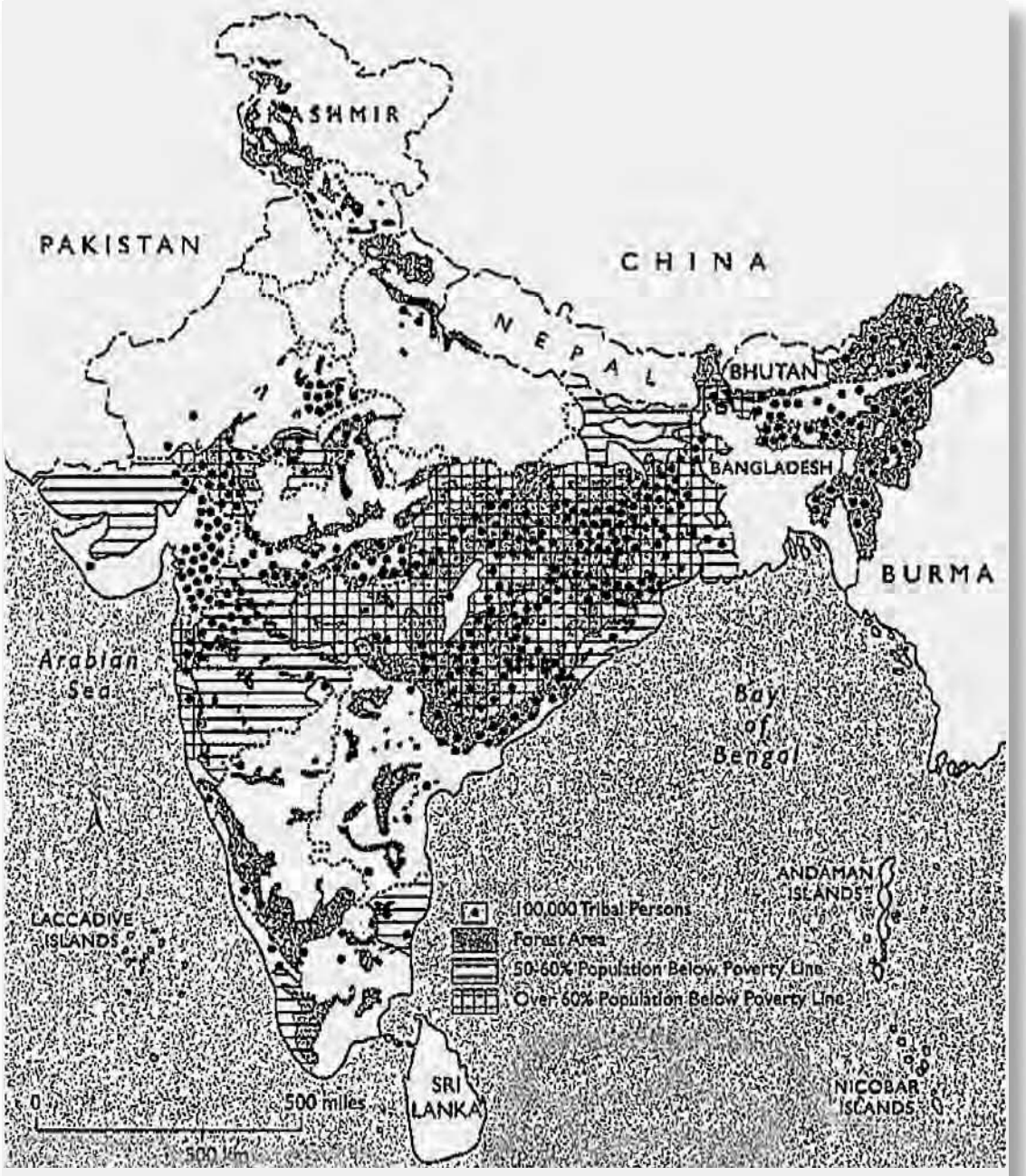
Table 2: Comparison of growing stock and biomass in natural forests of India with that of other countries (1990)

PARAMETER	INDIA	TROPICAL ASIA	ASIA PACIFIC REGION	DEVELOPING COUNTRIES	WORLD
Growing Stock of Wood (m^3/ha)	47.00	140.00	125.00	113.00	114.00
Biomass (metric tons/ha)	93.00	181.00	171.00	169.00	131.00
Growing Stock per capita (m^3)	2.85	28.00	18.90	54.90	71.76
Biomass per capita (metric tons)	5.63	36.27	25.76	81.73	82.37

Source: GoI (1999)

[2] The tree cover estimates are for the entire country and include trees on non-forest lands.

[3] Each state has a forestry department, which works independently of forestry departments in other states. The Ministry of Environment and Forests at the central government level decides the policy framework and broad guidelines for all the states.



Source: Poffenberger and McGean (1996)

Map 1: Overlap of forest, poverty and tribal population in India

Many of these people depend on forests for meeting their basic needs of fuelwood, fodder, small timber for agricultural implements and house construction, and food and medicines in the form of non-timber forest products (NTFPs). The forest dependence is greatest among the poor, such as marginal farmers and landless workers. It is estimated that 600 million tonnes of forest produce valued at Rs 300 billion is collected annually from India's forests (GoI 1999)[4]. Forests also serve as an important safety net for the rural poor helping them survive through bad harvests, long periods of drought, seasonal shortfalls and other emergencies by providing them with access to livelihood diversification.

[4] USD 1 was approximately Rs. (Indian Rupees) 43 (April 2005).

Forest management and governance in India

History of forest management

Large-scale forest exploitation in India started during the colonial period. The timber extracted from forests was used for meeting the infrastructure needs of the government, including the expansion of the railways network.

In 1864, the Indian Imperial Forest Service was set up by the government with Dr. Dietrich Brandis, a German forester, as the first Inspector-General of Forests (Guha 1983). In 1865, the first attempt at forest legislation was made and a forest act was passed. A new forest act was drafted and passed in 1878. The colonial administration declared proprietary rights of the government over forests, and it was to be subsequently determined as to what extent these were limited by existing rights of private persons or communities (Ribbentrop 1900).

In 1894, a forest policy was announced that was not totally oblivious to the subsistence needs of the rural communities. However, commercial objectives dominated forest management. In 1927, another forest act was passed which reiterated state control over forests and still provides the legal framework for forest administration in India.

Industrial and revenue considerations continued to dominate Indian forestry even after independence. The government issued a forest policy statement in 1952 that focussed on "national needs" but was quite unsympathetic towards the needs of the forest-fringe communities. It noted: "The accident of a village being situated close to the forest doesn't prejudice the right of the country as a whole to receive the benefits of a national asset." (GoI 1952, in Lal 1992). Large tracts of forests were nationalised, which led to massive deforestation as forest owners felled trees before handing over the land. This increasing state control over forests led to forest degradation on the one hand, and alienation of forest-dependent communities on the other.

In 1970, the National Commission on Agriculture (NCA) was constituted to look into, *inter alia*, the problems of the forestry sector. The NCA suggested the replacement of mixed "low value" forests with monocultures of fast-growing commercial crops. It suggested the creation of forest corporations to manage forests on business principles. The NCA viewed the local communities' dependence on forests as a major cause of forest destruction and a major obstacle for commercial forestry. In order to free forest lands for commercial forestry, the NCA suggested that the local communities' needs should be met by a social forestry programme on non-forest lands, such as village commons, government wastelands and farmlands (GoI 1976). Along with commercial plantations on state forest lands, a massive social forestry programme was launched on non-forest lands. This led to the birth of the "social forestry" programme in India. Ambitious projects were launched in different states with the assistance of international funding agencies. The magnitude of the programme can be gauged from the fact that between 1980 and 1997, 24.59 million hectares of plantations were established in the country (FSI 1999).

The emergence of people's formal participation in forest management

By the mid-1980s, it was apparent that the strategy suggested by the NCA was not working. The forests were continuing to be degraded and there were increasing conflicts between the local communities and the FD. A new forest policy was issued in 1988 that completely reversed the objectives of forest management. The new policy stressed the management of forests for conservation and meeting local communities' needs and made commercial exploitation and revenue generation subsidiary to these objectives.

In 1990, based on the new forest policy and encouraging results from some pioneering experiments in community-based forest management, the government started the Joint Forest Management (JFM) programme (Box 1). The central government issued circular No. 6.21/89-FP, dated June 1st 1990, direct-

ing all states to involve local communities and voluntary agencies in the protection and management of degraded forest lands.

Current issues facing Indian forestry

Forest degradation

The Forest Survey of India monitors forest cover through remote sensing and publishes "The State of Forest Report" biennially. These reports have been regularly published since 1987 and have been used to produce Table 3.

Table 3 indicates that the forest cover of India is not declining, even though the population and economic output have grown rapidly in the past decade and a half. However, these figures do not reflect the true health of forest ecosystems, as apart from canopy cover, no other parameter is systematically monitored. In the 1995 report, the Forest Survey of India estimated that 53% of the forest area was affected by fire, 78% was overgrazed and 74% suffered from inadequate regeneration (GoI 1998).

Table 3: Forest cover as percentage of geographical area

YEAR	FOREST COVER %
1987	19.49
1989	19.43
1991	19.45
1993	19.45
1995	19.43
1997	19.27
1999	19.39
2001	20.55

Demand-supply gap

There is a huge demand-supply gap of various forest products often resulting in unsustainable extraction of several products, for example, fuelwood. India spends a large amount of resources on importing various forest products, such as timber and pulp. The import of these products has increased sharply in recent years.

Box 1 Early initiatives in participatory forest management (PFM) in India

During 1971-72, the Forest Department faced constant disruptions with its experiments in silviculture at Arabari in the Midnapore district of West Bengal, due to fuelwood extraction and cattle grazing by the local people. Unable to stop the villagers, the forest department held a meeting with the local community and offered them incentives for staying away from the forests. The incentives included additional employment in forestry operations and a share in the income from the forest. The local community was organised into a forest protection committee to protect the forest from illegal harvesting, overgrazing, fire and encroachment for agriculture. The experiment proved successful. Gaining respite from incessant lopping and grazing, the degraded sal (Shorea robusta) forest of the area rapidly regenerated.

During the same time, in the city of Chandigarh, the Sukhna Lake had almost silted up because of massive soil erosion caused by the loss of hill forests and overgrazing. An effort was initiated to involve people in the management of the nearby forest land and to control grazing in the two villages of Sukhomajri and Nada in Haryana. These people were provided alternatives in the form of small earthen dams that raised agricultural output and reduced their dependence on unsustainable grazing. The control of grazing not only reduced erosion but led to a dramatic increase in grass productivity. For instance, in Nada village, grass productivity rose from a dismal 40 kg per hectare in the 1970s to over 2,000 kg in 1986. The forest department allowed the local people to harvest this grass.

Balancing conservation and livelihoods

Balancing conservation and livelihoods is a major issue facing Indian forestry. There are an estimated 147 million people living near forests. Of the about 84.3 million people in scheduled tribes, the majority reside in and around forests. Most are dependent on forests for meeting their basic subsistence needs. In spite of the Joint Forest Management programme, there are widespread conflicts between the forest department and the forest fringe communities over the extraction of forest products and cultivation on forest lands. The issue of cultivation on forest land has recently resulted in a national level debate. Many communities traditionally practice shifting cultivation or extend their agriculture fields into forests as per their needs. As the FD considers this a violation of forest laws, it often terms these people as "encroachers" and tries to evict them. However, many feel that actually it is the FD that has encroached upon the traditional rights of the local communities, especially the tribal people. In order to address this issue the national Ministry of Tribal Affairs has recently drafted a bill – Scheduled Tribes (Recognition of Forest Rights) Bill, 2005 – to give rights over forest land to the scheduled tribes. This has resulted in a major controversy with the Ministry of Environment and Forests and some conservationists expressing serious reservations about this bill. The recent disappearance of all the tigers from one of the tiger reserves has highlighted the lacunae in the current conservation approach and has brought the issue to the centre stage where it is being discussed at the highest policy levels.

Role of Panchayati Raj Institutions (PRIs)

Through an amendment in the Constitution of India (The 73rd Constitutional Amendment Act, 1992), a number of powers related to the preparation and implementation of plans for economic development and social justice have been devolved to the PRIs. Due to this constitutional mandate, many feel that the PRIs should have a greater role in the JFM programme. Many others, however, argue that greater involvement of the PRIs may lead to politicisation of the JFM programme and that the JFM should remain with the Forest Protection Committees.

International issues[5]

India has ratified a number of international agreements and conventions related to forests, such as the Convention on International Trade in Endangered Species (CITES), the Convention on Biological Diversity (CBD) and the Kyoto Protocol. These international agreements and conventions also shape national policies. For instance, the Biological Diversity Act, 2002 is a direct outcome of the CBD. Similarly, trade in all CITES species is prohibited under the Foreign Trade (Regulation and Development) Act, 1992. While India has been participating in international forestry dialogue, the government of India doesn't seem to be in favour of a legally-binding instrument (Box 2).

Box 2 Extract from the statement made by the Indian Minister for Environment and Forests at the ministerial segment of the second substantive session of the United Nations Forum on Forests on March 14, 2002

"While examining the possibility of the parameters of a legally-binding instrument, we would need to assess the sufficiency of the existing mechanisms and instruments and whether there is any requirement of a new instrument. In our view it is not the lack of instruments but the lack of implementation of existing instruments/programmes that is hindering the sustainable development of forests."

Source: http://envfor.nic.in.

[5] This section draws on Saigal et al., 2005.

Current state of forest governance

Governance structures at the national and state levels

Forestry is on the concurrent list of the Constitution of India, meaning that both the central and state governments can legislate on this issue. The decisions related to forestry are made at various levels and by different agencies. At the central level, the Ministry of Environment and Forests (MoEF) is the nodal agency for policy formulation, planning, promotion and coordination of forestry development programmes.[6] There are eight divisions of the MoEF that relate to forestry and wildlife: (i) Forest Conservation (ii) Forest Policy (iii) Survey and Utilisation (iv) External Assistance Projects (v) Research and Training (vi) Indian Forest Service (vii) Forest Protection, and (viii) Wildlife. In addition, there are three directorates for: (i) Project Tiger (ii) Project Elephant, and (iii) Animal Welfare (GoI 1999).

The National Afforestation and Eco-development Board (NAEB), within the MoEF, formulates policies and ensures coordination of the nationwide forestry programmes (especially afforestation on government forest lands) being implemented by the states' FDs. It is the nodal agency for implementing the JFM Programme.

There are several centrally sponsored schemes through which funds are provided by the MoEF to different states. Funds for participatory forestry are provided through the National Afforestation Programme, which was started during 2002-03 with a fund allocation of over Rs 10 billion for the duration of the tenth Five Year Plan (2002-03 to 2006-07).

Each state and union territory has its own forest department. The FD is entrusted with the responsibility of forest administration, enforcement of forest-related laws and implementation of forest policy objectives and strategies. It is also responsible for implementation of the government's forestry programmes and regulation of flow of forest products for local or commercial use. The forests are usually organised in circles, divisions, ranges, sections and beats for the purposes of administration and management.

In addition to forest departments, many states also have forest development corporations. These were created in most states as a result of the recommendations of the National Commission on Agriculture whose report was published in 1976. The main objective of the forest development corporations was to raise high-yielding industrial plantations on forest lands after clearing 'low value' natural forests. However, after the issuance of the new forest policy and the ban imposed on the clear-felling of natural forests in 1988, these corporations are either involved in afforestation of wastelands or in harvesting and marketing of forest products. Some states also have established separate government-owned corporate bodies for the development of pulpwood and the processing of wood and NTFPs (e.g., Kerala Bamboo Corporation and Bihar Lac Board).

The central government mainly interacts with the state governments on issues related to national policies and laws, international cooperation and centrally-sponsored schemes. Through the Forest (Conservation) Act 1980, the central government controls the diversion of state forest land for non-forestry purposes and states need to have clearance from the MoEF in this regard. The MoEF also approves and monitors working plans (forest management plans). The Wildlife (Protection) Act, 1972 (amended in 2002) and provisions of the CITES are enforced through the regional wildlife offices located in New Delhi, Mumbai, Calcutta and Chennai, and sub-regional offices at Guwahati, Kochi and Patna, with the help of state wildlife wings and the customs department.

The current governance system has both strengths and weaknesses. Some of the strengths are:

[6] The MoEF was formed in 1984. Before its creation, the Ministry of Agriculture looked after forestry matters at the central level.

- The presence of a dedicated government service (Indian Forest Service and State Forest Services) provides a pool of trained human resources for managing forests.
- State forest departments have presence and some infrastructure even in most remote areas.
- Forestry, being on the concurrent list, allows both the central government and the states to legislate on forestry matters.
- There is a division of power between central government and the states reflecting the federal nature of the country.
- There are dedicated research/education and monitoring institutions in the form of the Indian Council of Forestry and Education, the Forest Research Institute and the Forest Survey of India.
- Due to the presence of a well-developed legal framework, members of the general public are able to request the courts to enforce various forest and environmental laws. The public have frequently used public interest litigation as a legal instrument for forestry and environmental matters in the past few years.

Some of the weaknesses are:

- Forest governance is too bureaucratic and hierarchical, increasing response time.
- Several roles (e.g., policy-making, implementation, enforcement and research) are carried out simultaneously by the states' forest departments.
- The legal category of "forest land" encompasses many ecosystems, such as high mountains, natural grass lands, wetlands, mangroves, and so forth. As these areas are also legally classified as forests, there is often excessive focus on trees.
- Many states are facing a severe lack of funds crisis and consequently investment in the forestry sector is low.
- There are limited opportunities for cross-learning across states.
- There are frequent transfers of key officials that affect various ongoing programmes.
- Excessive job security makes some officials complacent.

[7] This section draws on Borgoyary, Saigal and Peters (2004).

Policy and legal framework[7]

The broad policy framework at the national level is provided by the National Forest Policy, 1988 and the National Conservation Strategy and Policy Statement on Environment and Development, 1992. However, these policies are only statements of intent and do not have the force of law. Recently (2004), a National Environment Policy has also been prepared but it is still at the draft stage.

The legal framework is provided by three national laws: the Indian Forest Act, 1927; the Wildlife (Conservation) Amendment Act, 2002; and, the Forest (Conservation) Act, 1980 (amended 1988). The Indian Forest Act is the basis for forest administration in the country. The Wildlife (Conservation) Act governs the protected area network (national parks and sanctuaries), which covers 15.6 million hectares. The Forest (Conservation) Act mainly controls the diversion of forest land for non-forest purposes. Recently (2002), the Biological Diversity Act was passed and seeks to regulate access to the country's biodiversity.

National Forest Policy, 1988

The National Forest Policy places stress on managing forests for their environmental and ecological functions and for meeting the subsistence needs of forest fringe people. It has set a national goal of bringing at least one-third of the country's area under tree cover.

The policy has nine basic objectives that include:

- The maintenance of environmental stability through preservation and, where necessary, the restoration of the ecological balance that has been adversely disturbed by the serious depletion of the forests of the country.
- Conservation of the natural heritage of the country by preserving the remaining natural forests with the vast variety of flora and fauna which represents the biological diversity and genetic resources of the country.

- Verification of soil erosion and denudation in the catchment areas of rivers, lakes, reservoirs in the "interest of soil and water conservation, for mitigating floods and droughts and for the retardation of siltation of reservoirs.
- Verification of the extension of sand dunes in the desert areas of Rajasthan and along the coastal tracts.
- The substantial increase of forest cover in the country through massive afforestation and social forestry programmes, especially on all denuded, degraded and unproductive lands.
- Meeting the requirements of fuelwood, fodder, minor forest products and small timber requirements of the rural and tribal populations.
- Increasing the productivity of forests to meet essential national needs.
- Encouragement of the efficient utilisation of forest products and the maximisation of a substitution for wood.
- Creation of a massive people's movement with the involvement of women for achieving these objectives and minimising pressure on the existing forests.

The policy's aim is to ensure environmental stability while maintaining and ecological balance. It emphasises the need to subordinate the derivation of direct economic benefits to this aim.

National Conservation Strategy and Policy Statement on Environment and Development, 1992

In June 1992, the central government issued the National Conservation Strategy and Policy Statement on Environment and Development. It focusses on issues related to sustainable development and provides guidelines "to weave environmental considerations into the fabric of our national life and of our development process." The strategy also recognises the need for people's involvement in order to address the environmental challenges facing the country.

Indian Forest Act, 1927[8]

The Indian Forest Act forms the basis of forest administration in India. It establishes three categories of forests. The most restricted category is "Reserved Forest." In Reserved Forests, most uses by local people are prohibited unless specifically allowed by a forest officer in the course of "settlement." In "Protected Forests," the government retains the power to issue rules regarding the use of such forests, but in the absence of such rules, most practices are allowed. Among other powers that the state retains is the power to reserve specific tree species in Protected Forests, which has been used to establish state control over trees whose timber, fruit or other non-wood products have revenue-raising potential. A third classification is "Village Forests" in which the state government may assign to "any village-community the rights of government to or over any land which has been constituted a Reserved Forest."

Forest Conservation Act, 1980[9]

The Forest Conservation Act of 1980 attempts to slow deforestation caused by the conversion of forest lands to non-forest purposes. It also restricts leasing or assigning of forest lands to any private entity [sub-clause 2 (iii)] and prohibits clearing of naturally grown trees on forest lands for the purpose of using the land for reforestation [sub-clause 2 (iv)]. Under this Act, no state government can authorise such conversion without securing the central government's approval. It is pertinent to mention that this Act does not itself ban any non-forest activity or the de-reservation of forest land. All it requires is that the permission of the central government be secured for such actions.

The Wildlife (Protection) Amendment Act, 2002

The Wildlife (Protection) Amendment Act, 2002 has amended the Wildlife (Protection) Act, 1972. As its name suggests, this Act mainly deals with

[8] From Upadhyay and Upadhyay (2002), which draws on Lindsay (1994).
[9] From Upadhyay and Upadhyay (2002).

the protection of wildlife and the management of protected areas. From the perspective of participatory forestry, important additions are the constitution of an advisory committee for the management of sanctuaries and the addition of two new categories of protected areas, viz. conservation reserves and community reserves.

The Biological Diversity Act, 2002

This Act is a direct result of the Convention on Biological Diversity, 1992. The Act defines certain terms such as "biological diversity" and "sustainable use". It has provisions for setting up the National Biodiversity Authority, State Biodiversity Boards and local Biodiversity Management Committees. The National Biodiversity Authority regulates access to the country's biological resources. Prior intimation needs to be given to the State Biodiversity Boards for obtaining biological resources for certain purposes. The Act also has a provision for the constitution of the National Biodiversity Fund.

In addition to these policies and laws, the Environment Protection Act, 1986 (amended 1991) is the other major legislation that affects forest administration.

At the state level there are numerous policies, laws, rules and orders that contribute to the way in which forests are utilised and managed. These cover a broad range of subjects ranging from forest administration to the marketing and transport of forest produce. There are also special provisions for the administration of scheduled areas.

Decentralisation in forest governance: Progress and challenges

The process of decentralisation in forest governance started with the National Forest Policy of 1988. The following extracts from the policy make the focus of the policy document clear:

- "The holders of customary rights and concessions in forest areas should be motivated to identify themselves with the protection and development of forests from which they derive benefits". (Paragraph 4.3.4.2)
- "Forest conservation programme cannot succeed without the willing support and cooperation of the people. It is essential, therefore, to inculcate in the people, a direct interest in forests, their development and conservation, and to make them conscious of the value of trees, wildlife and nature in general". (Paragraph 4.10)
- "The life of tribals and other poor living within and near forests revolves around forests. The rights and concessions enjoyed by them should be fully protected. Their domestic requirements of fuelwood, fodder, minor forest produce and construction timber should be the first charge on forest products". (Paragraph 4.3.4.3)
- "…The revenues generated through such programmes should belong to the *panchayats* where lands are vested in them; in all other cases, such revenues should be shared with the local communities in order to provide an incentive to them". (Paragraph 4.2.3)

The Joint Forest Management programme was initiated at the national level in 1990, two years after the National Forest Policy was adopted.[2] The JFM programme created space for community involvement on state forest lands. Under JFM, the FD and the village community enter into an agreement to jointly protect and manage forest land adjoining villages and to share the responsibilities and benefits. The village community is represented through a body specifically formed for the purpose. These are known by different names in different states (e.g., Vana Samaraksha Samitis in Andhra Pradesh and Hill Resource Management Societies in Haryana) but are most commonly referred to as Forest Protection Committees (FPCs).

The community gets greater (often defined) access to a number of non-timber forest products and a share in timber revenue in return for accepting increased responsibility for the protection of forest from fire, grazing and illicit harvesting. In all states, the ownership of the land remains with the gov-

ernment – only management responsibility is shared with the community.

Following the 1990 JFM Circular, several states have now issued notifications pertaining to the formal adoption of JFM. Currently, twenty-seven states have adopted JFM and the latest available figures indicate that by September 2003 there were 84,632 JFM groups protecting and managing over seventeen million ha of state forest lands (Table 4).

Table 4: Progress of Joint Forest Management (as on September 10, 2003)*

STATE	NUMBER OF JFM GROUPS	AREA UNDER JFM (HA)
Andhra Pradesh	7,245	1,886,764.00
Arunachal Pradesh	308	80,217.00
Assam	503	79,251.00
Bihar	493	267,240.94
Chhattisgarh	6,881	2,846,762.16
Dadra & Nagar Haveli	NA	NA
Goa	26	13,000.00
Gujarat	1,424	160,525.41
Haryana	875	56,000.00
Himachal Pradesh	835	290,922.80
Jammu & Kashmir	935	49,544.00
Jharkhand	3,358	847,967.93
Karnataka	3,470	232,734.00
Kerala	323	170,712.00
Madhya Pradesh	13,698	5,500,000.00
Maharashtra	5,322	1,411,215.00
Manipur	205	93,941.00
Mizoram	249	10,980.00
Nagaland	306	22,930.00
Orissa	15,985	821,504.00
Punjab	287	56,243.95
Rajasthan	3,667	376,766.00
Sikkim	158	600.00
Tamil Nadu	1,816	445,965.00
Tripura	234	34,154.00
Uttar Pradesh	2,030	112,652.93
Uttaranchal**	10,107	859,028.00
West Bengal	3,892	604,334.00
Total	**84,632**	**17,331,955.12**

Source: Bahuguna et al. (2004)

*Note: * The figures in this table indicate the total number of JFM groups that have been created and do not indicate how many of these groups are actually functional.*

*** Van Panchayats (forest councils) are also included in the state's JFM figures.*

Within the Joint Forest Management programme, the role and powers of the community groups and the FD are specified in the JFM Order issued by the state. The benefit sharing mechanism, which varies from state to state, is also specified in the Order.

The funding for the JFM programme has been obtained through donor assisted projects by most states. The central government also provides support for JFM through the National Afforestation Programme. The scheme is being implemented through a two-tier structure consisting of Forest Development Agencies (FDAs) and JFM Committees (JFMCs). FDAs are registered at the territorial/wildlife division level as federations of JFMCs under the Societies Registration Act. The funds flow directly to the FDAs and are then passed on to the JFMCs. It is specified that 80% of the funds released by the central government for implementation of the work programme must be transferred to the account of the concerned JFMCs within 15 days of receipt by the FDA.

While JFM is a step in the right direction, much greater powers need to be devolved at the community level. Some of the constraints are:[10]

Conflict between forest policy and forest acts

While the forest policy of 1988 is very supportive of participatory forestry, it is merely a statement of intention of the government and does not have the required force of law. The Indian Forest Act 1927 forms the basis of forest administration in the country. It contains provisions for granting certain rights to communities (through the "settlement" process by declaring a forested area as "village forest"), but on the whole the Act has concentrated most powers in the hands of government officials, thereby providing no legal backing to the participatory forest management initiatives promoted by the current forest policy. The Forest Conservation Act and the Wildlife Protection Act are conservation-oriented legislations. They severely limit the community partnerships and centralise powers in the hands of the state. Even though a provision for "Community Reserves" has been introduced in the amended Wildlife Protection Act, these are to be created outside the national parks and wildlife sanctuaries.

Lack of legal recognition of JFM

One of the biggest shortcomings of the JFM programme is that it lacks a firm legal basis. Except in a handful of states (such as Jammu, Kashmir, Uttar Pradesh, Uttaranchal and Himachal Pradesh), the JFM programme is based on administrative orders that can be withdrawn or changed at any time. Moreover, often rights granted to a particular community under JFM conflict with the existing rights regime determined through the settlement process. The lack of adequate legal cover for JFM creates several problems. In many states, terms of partnership between the government and the local community have been changed several times through changes in the JFM resolutions. For instance, in Orissa, JFM groups formed on the basis of 1988 and 1990 government resolutions were declared null and void by the resolution of July 2003 (Pattanaik 2004).

Inadequate devolution of powers

The JFM Orders give limited powers to the communities, while the forest department retains many powers. In most states, the forest department has powers to unilaterally dissolve the forestry protection committees that can appeal only to a higher official of the FD. It often seems that field level functionaries of the FD play a key role in the selection of the FPC's Executive Committee members, record keeping and fund management. Further, the internal functioning of the FD continues to be top-down and hierarchical even as it tries to promote participatory forestry. This conflict between the FD's internal culture and new management objectives affects the implementation of JFM in the field.

[10] This section draws on Saigal (2004).

Problems with benefit-sharing mechanisms

There are several procedures and policies that conflict with the philosophy of JFM. For instance, there is enough evidence to show that the regular flow of NTFPs is more valuable to the communities than their share in timber, which is usually available after a long wait (often more than ten years), and it is often the flow of NTFPs (along with additional employment opportunities) that retain the interest of the community in the JFM programme. Still, several commercially valuable NTFPs are not shared with the community even under JFM.

Judicial interventions

In recent years, the higher judiciary has started playing an important role in matters concerning forests. The Supreme Court has issued orders on several forest-related issues. In an interim order passed in one Public Interest Litigation (PIL) in December 1996, the Supreme Court banned tree-felling in all forests unless there was a working plan approved by the central government. In another PIL case, the Supreme Court banned all collection of NTFPs from protected areas, including removal of dead and fallen trees within them (Sarin 2003). These orders are conservation oriented and have reduced the space for local management.

Project-based approach

In most states, JFM activities are being financed through externally assisted projects. While this has facilitated the extension of the JFM programme, it has also created some problems. JFM is either mainly restricted to the project areas, or if it is extended to other areas, there is often considerable disparity in the resources available for JFM groups in project and non-project areas. For example in the state of Himachal Pradesh, while a sum of approximately Rs 430 million was spent on a Department for International Development-supported project that covered around 150 JFM groups in two circles, the total sanctioned amount for the rest of the 364 JFM groups outside the project was only a fraction of this amount. Thus, the bulk of the effort was concentrated in two project circles only.

In the early 1990s, when many states were initiating JFM programmes, a larger process of decentralisation of political powers to the Panchayati Raj Institutions was also started. The 73rd Constitutional Amendment Act, 1992 aims to promote empowerment at the grassroots level by establishing three-tier PRIs as democratically elected institutions of local self-governance. Article 243G of the Constitution, which forms the crux of this amendment, requires state governments to devolve such powers and authorities upon PRIs so as to enable them to function as institutions of local self-governance with respect to:

- The preparation of plans for economic development and social justice; and,
- The implementation of schemes for economic development and social justice as may be entrusted to them, including those in relation to the matters listed in Schedule XI of the Constitution.

In essence, the 73rd amendment aims at establishing *panchayats* (village councils) as institutions of local self-governance and *gram sabhas* (general village body) as the base of democracy. Schedule XI of the Constitution lists 29 subjects with respect to which *panchayats* may prepare and implement plans for economic development and social justice for the area under their jurisdiction. Hence, the PRIs are to function, not as mere implementers of centrally determined development schemes, but to be actively involved in the local level planning process.

According to areas listed in Schedule XI, which are the responsibility of the PRIs, there are many areas that have a direct link with the objectives of forestry, for example social forestry and farm forestry, minor forest produce, soil conservation, land improvement, watershed development, fuel and fodder, poverty alleviation, welfare of the weaker sections, and maintenance of community assets. In 1996, the provisions of the PRIs were extended to Schedule V areas (tribal areas) through another Act—Provisions of Panchayats (Extension to Scheduled Areas) Act, 1996—which gave wide ranging powers to *gram sabhas*. It also specified

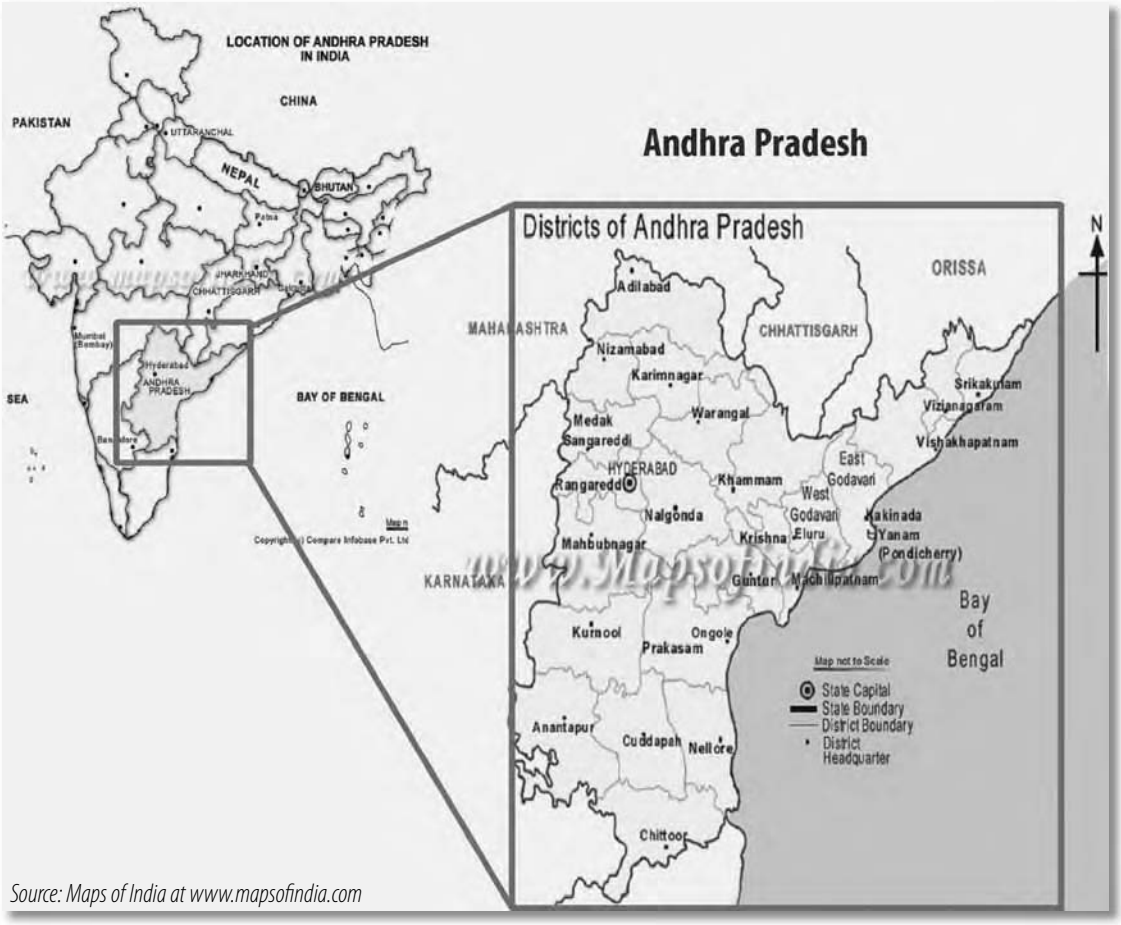
that the *panchayats* at the appropriate level and the *gram sabhas* are to be endowed with the ownership of minor forest produce.

As mentioned earlier, there are still several unresolved issues regarding the role of the PRIs in forestry. In many states attempts are being made to address the issues related to the JFM programme as well as PRIs. In the following section, a case study of the state of Andhra Pradesh is presented to illustrate this process. Over the past decade or so, Andhra Pradesh has moved from JFM to Community Forest Management (CFM). Even though the current approach has also been criticised by some activists, the case of Andhra Pradesh shows the general trend of JFM in the country.

CASE STUDY

Participatory forest management in the state of Andhra Pradesh

Andhra Pradesh, located in peninsular India, accounts for 7.9% of the country's population and about 8% of its land area (Map 2). The recorded forest area in the state is approximately 6.38 million hectares, which is about 23% of the state's geographical area. Based on satellite data, actual forest cover has been estimated to be about 16.02% of the total geographical area (FSI 1999). Andhra Pradesh shows a significant presence of tribes including the *Gonds*, the *Bhagathas*, the *Chenchus*, and the *Savaras*. The majority of these tribes are highly dependent on the forests for their subsistence and livelihood needs.



Map 2: Location of Andhra Pradesh state in India

History of forest management

As in other parts of India, by the 1980s forests in Andhra Pradesh were under serious threat from timber smuggling, over-exploitation by industry, forest fires, uncontrolled grazing, agricultural extension, and unmanaged exploitation of fire-wood and other forest products. Moreover, the colonial policy of exploitation of forests for commercial needs and the policy of restricting the traditional use of forestlands by local communities had left behind a legacy of conflicts between the local communities and the forest department, a trend which continued even after independence.

The increasing forest degradation coupled with the rising cases of conflict between the state and the local communities was becoming a major cause of concern in the state. Increasingly it was being realised that the 'state control' approach to forest management was unable to reverse these trends. In the 1980s, attempts were made to introduce participatory approaches in forest management through the initiation of a social forestry programme. Under this programme, plantation activities were encouraged on private and community lands (Venkatraman and Falconer 1998; Gopal and Upadhyay 2001).

The forest department took several other initiatives to promote "participatory management." For example, the FD leased out degraded forestlands on tree *patta*[11] (tree lease) to the weaker sections of the society for raising fuelwood plantations. This was later modified as reforestation of degraded forests with the "Family Assistance Method." However, none of these programmes yielded the expected results (Reddy undated).

Encouraged by the 1990 central government circular, and the success of participatory forest management initiatives in other states, like West Bengal and Orissa, the state government formally initiated JFM in Andhra Pradesh in 1992 through the issuance of a government order. Under this programme, community-based forest protection committees known locally as *Vana Samarakshana Samithis* (VSS) were established to protect the forest resources. The basic purpose of the VSS was to protect the forest from encroachment, grazing, theft, and fire, and to improve the forest in accordance with an approved joint forest management plan. The VSS could be formed by the involvement of a minimum of 50% of the total households of the villages adjoining the forests.

The spread of Joint Forest Management (JFM)

In the initial years of JFM, progress was very sluggish. Communities and the forest department both had to shed their inhibitory mindset and co-operate to achieve participatory forest development, which was a difficult task. Thus, the greatest challenge was in bringing attitudinal changes in the FD staff and in the community members (Mukherji, in Bahuguna et al. 2004). In 1994, the World Bank supported a five-year project that facilitated the progress of JFM in Andhra Pradesh.

The growth in the number of VSS was very slow until 1995-96. A manifold increase occurred in the number of VSS from just 133 in 1994-95, to 6,726 in 2001-02 managing 1.689 million hectares of forest area and involving around 1.3 million people, including 0.6 million women. The investment in JFM related activities was about Rs 2,114.1 million, 85% of which was used for the wage component generating about 40 million person-days (APFD 2000).

By 2004, there were officially 7,245 VSS, which were managing 1,886,764 hectares of forest land (or over 29% of state forest land) and involving 611,095 families (Bahuguna et al. 2004).

The introduction of Community Forest Management

The FD felt that the impact of JFM was positive in terms of improvement in the condition of forests and livelihood opportunities for the local communities.

[11] Tree patta is a contractual arrangement that gives the holder user rights of the resource.

This prompted the policy makers to continue this approach and further assistance from the World Bank was sought. After discussions, it was decided to further strengthen people's participation through the introduction of the Community Forest Management (CFM) programme. Under CFM, greater powers have been devolved to the local communities and there is a greater thrust on democratisation of the decision-making process (Table 5). The World Bank agreed to support the CFM programme of the state through a follow on project.

Table 5: Key differences between JFM and CFM

SECRETARY OF VSS MANAGING COMMITTEE	FOREST GUARD	FROM THE MANAGING COMMITTEE
President Position	One, usually male	Two, (President and Vice- President) either one or both should be women
Bank account	One	Two, one for project/government and the other for VSS benefits
Signatories of Bank Account	Forest Official and President	President and Vice-President signatory for both bank accounts; for project account the third signatory is a forest official
Financial Matters	Funds from Divisional Forestry Officer to VSS go through Forestry Range Officer and Section Officer	Funds directly deposited in VSS accounts
Relationship with Panchayat	No relationship	Panchayat president in the VSS advisory council and also chairs the meetings
Provision to collect fines from Forest Offenders	No provision	Fines up to 100 rupees
Role of NGOs	Not defined	Defined

Note: Table 5 has been drawn from Reddy et al. (2004).

The development objective of Community Forest Management is to reduce rural poverty through improved forest management with community participation and to balance the local community needs with external and environmental needs. The balancing process is envisaged through the increased productivity of the forest resources, the reduced dependence on forests through the substitution of demand and alternate livelihood opportunities, the upgrading of living standards and above all through inculcating a sense of ownership and pride among the forest dependent communities.[12]

Several policy changes also took place in the state to facilitate the initiation of CFM such as issuance of a new CFM Government Order in 2002.

Today, Andhra Pradesh is considered to be one of the leading states with respect to participatory forest management. In Andhra Pradesh, JFM has evolved into CFM, a system in which greater rights have been bestowed on the local communities. The role of the state's forest department is slowly changing from that of a manager and implementer to that of a facilitator.

Key players involved in Joint Forest Management/Community Forest Management

In this section we outline the key players involved in CFM in Andhra Pradesh, and the nature and extent of their role in this process of transition.

[12] This section draws from the Andhra Pradesh Community Forest Management project document produced by the Project Management Unit, Forest Department, Government of Andhra Pradesh.

Government

The forest department is the key player in 'participatory forest management' as it is formally responsible for managing the officially recorded forest lands in the state. It is also the main implementing agency of the JFM/CFM programme. The forest department has sought inputs from other stakeholder groups such as NGOs. It also organises training programmes for its staff members and community representatives to strengthen the implementation of the programme.

Local communities

The role of the local communities in the JFM/CFM programme is critical as a significant proportion of the population, especially the marginalised and vulnerable groups, depend on forests for their livelihood. Around 9,000 out of 28,000 villages in Andhra Pradesh are located on the fringes of the forest. About 65% of the forest area falls in the tribal belt where people are dependent on forests for fuelwood, fodder, small timber, food and medicines. The dependence is greatest amongst the poor, who are mostly marginal farmers and landless workers. The role of these local communities is important in CFM as the main objective of the programme is to hand over management rights of forests to communities. Many communities have benefitted from employment generated through the JFM/CFM programmes as well as through gaining a share of the income from the forest. With support from NGOs, many VSS have federated themselves at block, district and state level, to increase their level of influence both in the implementation of the programme and at the policy level.

Donor agencies

Donors have actively promoted community/participatory forestry development in the state. Under the World Bank assisted Andhra Pradesh Forestry Project, 3,540 million rupees were provided from 1994-2000 for strengthening JFM. Under the second phase (2002-2007), a provision of 6,530 million rupees has been made. Support of donor agencies has been critical for the spread of JFM/CFM in the state.

Non-governmental organisations (NGOs)

NGOs in Andhra Pradesh were informally involved in implementing natural resource management projects in the state before the initiation of JFM. NGOs were given a formal role in the implementation of the JFM programme and over 250 have participated (Mukherji 2004). These NGOs are playing a major role in bridging the gap between the forest department and the people. NGOs in the state are playing mainly three types of roles: facilitation, implementation and activism. They provide research inputs, organise training for the forest department staff, carry out policy analysis, and document and organise seminars/workshops. As a part of the implementation process, they facilitate the FD through helping in micro-planning exercises, carry out awareness camps, and so forth. In addition, there are several prominent activist NGOs that act as pressure groups to bring about pro-poor policy change. These NGOs organise mass mobilisation and demonstrations as part of their advocacy and lobbying activities.

Andhra Pradesh is one of the few states that has effectively developed networks to promote participatory forest management. Two types of networks exist in the state. At one level, forest protection groups have federated to form a network called '*Vanasamakhya*', facilitated by a NGO. On another level, the Andhra Pradesh NGO Network is a group of NGOs that carry out active policy advocacy and campaiging to bring about pro-poor policy change.

Implementation of Community Forest Management: Functioning and structure of the forest protection committees (VSS)

At the state level, the programme is directed and monitored by the Additional Principal Chief Con-

servator of Forests (CFM), who reports to the head of the State Forest Department. The next key level is the Division level, where the Divisional Forest Officer (DFO) is responsible for the field level implementation of the programme. The DFO and his team (Range Officers and subordinate field staff) play a critical role in interacting with the local communities and managing the programme on a day-to-day basis.

At the community level, the main institution created for implementing the programme is the VSS. If at least 50% of the households in an area agree to participate in the CFM programme, a VSS can be formed. The VSS consists of a general body and a managing committee. Two people from each household can become members of the VSS, out of which one must be a woman. All households of scheduled tribes (STs), scheduled castes (SCs) and those headed by women automatically become members of the VSS. It is also stipulated that in scheduled areas (tribal areas), the ST members should also be more than the non-ST members.

This general body elects a managing committee of 15 members, eight of which must be women. The managing committee, in turn, elects a chairperson and a vice-chairperson, at least one of whom should be a woman, to oversee and manage the affairs of VSS. In scheduled areas, all managing committee members have to be either ST or SC. The tenure of the managing committee is three years.

The Forest Range Officer, in consultation with the VSS and the Sarpanch (head of the local Panchayat) allocates the forest area to the VSS. The government order stipulates that the boundaries of this forest area should conform as far as possible to pre-existing and accepted boundaries of the concerned communities. Subsequently, a memorandum of understanding is signed between the VSS and the forest department.

Planning and implementation

The VSS prepares a micro plan for forest management as well as village development activities through participatory appraisal and consultation methods and in accordance with the guidelines issued by the FD. The managing committee is responsible for preparing an annual plan of operations based on the micro plan. The micro plan has to be first approved by the General Body of the VSS and subsequently by the DFO. The FD provides funds for the implementation of the micro plan (Reddy et al. 2004; Venkatraman and Falconer 1998). The VSS is supposed to execute all works itself through its members. The VSS maintains two bank accounts *viz*. "Government Account" (in which funds received from government sources are deposited) and "VSS Account" (in which funds generated by VSS internally or from non-government sources are deposited). The Government Account is jointly operated by the VSS office bearers and a FD representative. The funds for implementation of the micro plan are routed through the Government Account.

Monitoring and evaluation

There are a number of committees at different levels to monitor the progress of the programme. At the VSS level, an "Advisory Council" comprises the concerned Forest Section Officer, Forest Beat Officer or Forest Assistant Beat Officer, the *Panchayat Sarpanch*, the representative of the Village Tribal Development Agency in scheduled areas (to be nominated by the Integrated Tribal Development Agency or ITDA), the Village Administrative Officer, the NGO actively involved in assisting the VSS, and the Village School Headmaster/Headmistress. One of the key functions of the Advisory Council is to review the micro plan and annual plan and advise the VSS on strategies and available resources for implementing them.

Other committees are the District Forest Committee, ITDA Level Sub-Committee, Forest Division Level Coordination Committee and the State Level Forest Committee. All these committees also have NGO representatives. Apart from these committees, regular monitoring is carried out by the FD through its staff and consultants. Valuable inputs are also provided by NGOs and their networks (APFD 2000).

Cost benefit sharing

The following are the duties and responsibilities of the VSS as provided in the government order:

- Ensure protection of forest and assist the Forest Department in protecting the adjoining forests whenever such assistance is sought for by the Department.
- Make other villagers aware of the importance of forests.
- Prepare micro plans and annual plans in accordance with the corresponding working plan.
- Manage forests in accordance with the approved micro plan/annual plan.
- Apprehend offenders of forest law and hand them over to the concerned authorities to take action. For minor offences the VSS can collect advance Compounding Fees not exceeding Rs. 100.

The sharing of benefits under CFM in Andhra Pradesh is amongst the most liberal in the country. The benefits shared with the VSS from the forests managed by them are:

- All NTFPs.
- All intermediate products obtained from silvicultural operations in natural forests.
- All timber and bamboo (including from bamboo plantations) harvested from the forest managed by them, except for plantations.
- In case of teak plantations within the VSS area whose age is known, twice the proportionate yield harvested (including the yield from thinning) with reference to the age of the plantation and the period of maintenance by the VSS. The maximum entitlement will not exceed the total yield of the plantations.
- In case of other plantations, whose age is known, 50% of the harvest (including thinning) of the period of management of the plantation by the VSS.
- All the timber obtained from the second and subsequent rotations of all plantations.
- For offence cases handed over to the FD, the VSS is entitled to a 50% share of the "compounding fee" subject to certain conditions.
- The VSS is also entitled to a 50% share of the *beedi* leaf (*Diospyros melanoxylon*) net revenue arising out of the *beedi* leaf produced in the VSS area.

Critique of Joint Forest Management and Community Forest Management

JFM/CFM in Andhra Pradesh is often acclaimed as one of the successful initiatives in participatory forestry in India due to its scale and impact in terms of people's mobilisation and involvement, improved forest cover, income generation for local communities, development of community assets and institutions, and improved relations between the forestry department and local communities.

However, it has also been criticised for: sustaining an asymmetrical power relationship between local communities and the FD staff; increasing intra- and inter-community conflicts; a mismatch between policy and implementation; and, placing a disproportionate burden of the costs on the weaker sections of the community through forest closure and the removal of "encroachers" on forest land. The forestry department has also been criticised for trying to involve the corporate sector in the programme (Mahapatra 2000).

The reality is to be found somewhere in between these two extreme viewpoints. While the CFM programme has certainly led to benefits for many local communities, some of the problems listed by the critics do exist in some areas.

Policy recommendations

Based on the preceding discussion, the following policy recommendations are presented as a means to promote good forest governance in India.

1 **Security of tenure and rights of the community :** There is a need to ensure the security of tenure and the rights of the community through legal measures. At present, rights granted to the community can be easily withdrawn by the forest department after the community has spent years (even decades) protecting and regenerating a forest patch. The Forest Protection Committees, which are community institutions, can be unilaterally dissolved by the forest department. There is a need to repeal or amend provisions in existing forestry laws that go against the spirit of community forestry. Genuine empowerment of local communities will take place only when legal rights are conferred on the community and conflicting rules and procedures amended. Further, adequate safeguards need to be built into the programmes to protect the interests of weaker sections, including women, within the community.

2 **Role of PRIs :** The role of PRIs in forest management needs to be clearly defined. While ideally PRIs should be closely involved as they are democratically elected local bodies, concerns such as the danger of politicisation, mismatch between the jurisdiction of PRIs and forest and social boundaries and the lack of capacity also need to be taken into account. The MoEF should engage in a dialogue with other stakeholder groups to arrive at a consensus on this issue.

3 **Project approach:** The current approach of treating community forestry as a "project" needs to be changed and it should be integrated into the regular functioning of the forest department. Several of the forest department's internal processes and procedures need to be reviewed from the perspective of community forestry and anomalous ones revised.

4 **Monitoring systems:** There is presently excessive emphasis on just one indicator of forest health, *viz*. canopy cover. Consequently, there is undue emphasis on raising tree plantations, sometimes even in areas where these are not needed. Other indicators of forest health (e. g., biodiversity, regeneration, and so forth) should be included in the biennial forest assessments carried out by the Forest Survey of India. An assessment of livelihood impacts of various programmes should also be carried out. At present most of the reporting is on inputs and outputs (money spent, trees planted, and so forth) rather than outcomes (impact).

5 **Production outside state forest lands :** While a significant proportion of the demand of wood and other forest products is being met from farms, homestead gardens and commons, the potential is far greater. If the right policy environment is created, farmers can produce a far greater amount of wood and other products. This would reduce pressure on state forests which can be managed for conservation and local community needs as envisaged in the National Forest Policy.

6 **Empowerment through awareness :** At present, awareness about various policies and programmes at the field level is very low. NGOs and other agencies having reach and credibility among forest fringe communities can play an important role in this regard. Even basic awareness of laws and people's rights can go a long way in improving forest governance – through greater people's participation in decision-making, transparency and accountability of public officials.

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GOOD FOREST GOVERNANCE IN NEPAL

K.R. Kanel[1]

[1] Department of Forests, Ministry of Forests and Soil Conservation, Nepal.

Introduction: Good forest governance

In the context of Nepal, governance is becoming increasingly important to achieve the national objective of poverty alleviation. One of the four pillars of the Tenth Plan (2002-2007) and the Poverty Reduction Strategy Programme is improved governance.

For different institutions, governance means different things. In the national context, governance can be defined as the foundation of state power, electoral arrangements, rights of representation, rules of law, transparency and financial accountability, and an efficient and effective public service (Shrestha et al. 1998). According to the UNDP, the concept of good governance rests on four pillars. These are ownership, equity, transparency and accountability, and efficiency (UNDP 2002). For wealthy individuals, governance can mean the exercise of one's autonomy. For poor and marginalised people, governance could mean greater opportunity for their involvement in public policy making and a better chance of bureaucrats behaving responsively towards them (Pokharel and Grosen 2001).

Good governance takes on special meaning when applied to the utilisation and management of forests, especially in countries such as Nepal where forests are an integral part of much of the landscape and where poor people are particularly dependent on forests to supplement their livelihoods. With a view to the sustainable management of forests, the Regional Community Forestry Training Centre describes good governance as follows:

> *Rule of law; compliance of rules and decisions; transparency; accountability; decentralisation and devolution of power and authority; defined roles and responsibilities; participatory decision making; gender sensitivity, equity, representation and power balance; bi-directional flow of information horizontally and vertically are perceived to be some of the indicators of good governance (RECOFTC 2002).*

This paper sets as its main task an assessment of whether changes in forestry-related legislation and practices in Nepal are indicative of a movement towards good forest governance. Particular emphasis is placed on the national community forestry programme, which has sought to bring decision-making regarding how forests are to be managed and utilised much closer to the users. We begin with a brief description of the contemporary political situation and socio-economic conditions in Nepal. We trace the history of forest management and conservation in Nepal and discuss the decentralisation process that has reshaped forest governance. We next describe the community forestry programme, its achievements and present shortcomings. A case study of the Ghorlas community forest user group is presented to illustrate what *can* be achieved through community forest management. We conclude with a list of recommendations to further improve forest governance in Nepal.

Country overview

Contemporary political situation

Nepal is a small mountainous country located between India and China in the central Himalayas. Nepal's total land area is 147,181 square kilometres. The population according to the 2001 Census is 23 million, with a 2.24% annual growth rate. Population density is about 157 people per square kilometre (CBS 2001).

Nepal's first constitution was issued in 1959 and the first democratic Election was held in the same year. King Mahendra Bir Bikrama Shah Dev declared a failure of the multiparty system in 1961 and dismissed the government. In the same year, a new constitution was promulgated establishing a party-less *panchayat* system. In 1990, the Nepali Congress and United Left Front initiated a popular demonstration against the *panchayat* system leading to its collapse. In the same year, the King promulgated a new constitution in consultation with the major political parties under which a multiparty and parliamentary system of governance was guaranteed.

Not satisfied with the existing political system, an extreme left communist faction, the Maoists, initiated a "people's war" in 1996. Nepal's economic problems, widespread poverty and social disparity, such as exclusion from decision-making resulting from caste and class-based discrimination, political instability, corruption and poor governance gave strength to the Maoist movement. The insurgency has gown significantly during the last few years. It is estimated that about 11,000 lives have been lost. Many government office buildings, including those of the Department of Forests have been destroyed by the Maoist rebels. Field patrolling by the forest officials and community members is becoming more difficult due to the insurgency.

The parliament was dissolved by the King in May 2002 on the recommendation of the prime-minister. The tenure (five years) of the local governments expired in July 2002, resulting in vacancies of all the local level elected positions. The central government nominated people for the key positions of the local government, but due to the on-going Maoist insurgency many nominated officials have resigned.

Socio-economic conditions

Nepal is a pluralistic society with diverse ethnic groups, castes and religious communities. Nepal has 60 recorded caste and ethnic groups and 70 languages and dialects. Many ethnic and caste groups have been historically disadvantaged mainly because of a lack of access to land and employment opportunities. Poverty is widespread. The Ninth Plan (1997-2002) had sought to reduce absolute poverty from 42% to 30% of the population. However, at the end of the Ninth Plan absolute poverty was still as high as 38%. The present Tenth Plan (2002-2007) again seeks to reduce the proportion of the population below the poverty line to 30%.

More than 80% of Nepalis are engaged in agriculture, yet agriculture contributes to less than 40% of Gross Domestic Product. Land ownership is highly unequal. More than 70% of farmers have less than one hectare of land (HMGN 1998). The bottom 40% of agricultural households use only 9% of total agricultural land and on average own less than 0.5 hectare, while the top 6% occupy more than 33% of agricultural land (HMGN 2002.). Thus, income distribution is very skewed and most of the 38% of people who live in poverty survive on below 2,214 calories per person per day and at an income below Rs 6,100 per person per year (ibid).[2] The wage that women earn is generally lower than that of men for the same work. Table 1 provides indicators of the social and economic conditions in Nepal at the end of the Ninth Plan.

[2] On 20 October 2005 USD1 = Rs (Nepal Rupees) 68.02 (source: http://www.xe.net/ucc/)

Table 1: Social and economic status of Nepal in 2002

INDICATORS	ESTIMATES
Population below absolute poverty	38.0%
Literacy rate of population above 15yrs	49.2%
Primary school enrolment	80.4%
Infant mortality rate	64.2/1,000
Maternal mortality rate	740.0/100,000
Families with drinking water facilities	61.9%
Average life expectancy	61.9%
Per capita GNP	US$ 240.0
Annual growth rate	3.6%

Source: HMGN (2002)

Forest management in Nepal

Overview

The area covered by forests, shrub-land and the protected area system, which includes national parks, wildlife reserves, hunting reserves, conservation areas and buffer zones, is about 5.83 million hectares, or 39.6% of the total land area of Nepal (DFRS 1999). The forest area has decreased at an annual rate of 1.7% from 1978 to 1994, whereas forests and shrub-land together have decreased at an annual rate of 0.5% over the same period (DFRS 1999). Most of the depleted forest area has been converted to shrub-land.

Eighteen per cent of land falls under the protected area system. The protected areas not only cover forests, they also include mountains with permanent snow and some cultivated land. About 10% of forests and shrub-land are under the protected areas system. Protected areas are managed by the Department of National Parks and Wildlife Conservation (DNPWC), whereas the national forests are under the jurisdiction of the Department of Forests. These two departments and another three departments, whose duties are mainly the service delivery of watershed management, the development of technology and markets for non-timber forest products (NTFPs), and forestry research and surveying, are within the Ministry of Forests and Soil Conservation. The Ministry is responsible for policy formulation and coordination, whereas the departments are responsible for programme implementation.

The Ministry undertook extensive consultation with local people, non-governmental organisations, international agencies and others to prepare comprehensive forestry legislation to manage the national forests of Nepal. The consultation process culminated in the passing of the Forest Act in 1993 and formulation of the Forest Rules in 1995. Under the Forest Act (1993), the forests of Nepal are classified as private or national forests. For national forests, although the land on which the trees grow belongs to the state, the management and sustainable utilisation of the forests can be assigned to different entities. For the purpose of management, national forests are divided into different types, namely government-managed, protection, community, leasehold and religious forests. The objectives of each type of forest management are described in the Forest Act (1993) and the Forest Rules (1995) as follows:

- **Government Managed Forests**: Forests managed by government for the benefit of the whole country and its people.
- **Community Forests**: Forests handed over to the local Community Forest User Groups for their collective benefits.
- **Protection Forests**: Forests labelled as "protected forests" that are managed for environmental, scientific and cultural purposes.
- **Leasehold Forests:** Forest handed over to forest-based industries for the production of raw material, or handed over to poor people to assist them in meeting their basic survival needs, through, for example, the collection of fuelwood or NTFPs.
- **Religious Forests**: Forests handed over to the local religious institutions for their development, protection and utilisation.

A further forest type is "collaborative forest." This is a recently developed concept of forest management involving partnerships between local people, local government and the Department of Forests, with inputs and management shared among the partners. Collaborative forests are not provided for in the Forest Act (1993) and Forest Rules (1995), but have subsequently been piloted.

National institutions for forest management

The Ministry of Forests and Soil Conservation (MFSC), the Department of Forests and the Forest Products Development Board comprise the national bodies responsible for forest management.

The MFSC has four technical divisions, namely the Foreign Aid Co-ordination Division, the Planning and Human Resource Development Division, the Monitoring and Evaluation Division and the Environment Division. Senior foresters equivalent to joint secretary level positions head all the divisions. The Department of Forests has three divisions, namely the National Forest Division, the Community Forest Division and the Planning Division. In the field, forest management activities are implemented through 74 District Forest Offices under the Department of Forests. Each District Forest Office has a number of Illakas (sub-districts) and a number of Range Posts under the Illaka office. The number of Illakas can reach up to three and Range Posts are from eight to fifteen per district. The Forest Products Development Board is a quasi-government body. It is managing forests in three different areas under three projects, presently without any assistance from international agencies. The three projects are the Sagarnath Forest Project, the Ratuwamai Forest Project and the Nepalgunj Forest Project.

Challenging the highly centralised system of forest management

The Department of Forests was established in 1942 to promote "scientific forest management." It was given the responsibility of managing the national forests, which it did largely without seeking input from non-state actors. Its control was further extended by the Private Forest Nationalisation Act of 1956, which nationalised all private forests.

Forest management at this time was only protection oriented. The first Forest Act was promulgated in 1961, which provided special powers to the forest officers, including the authority to arrest forest offenders without a warrant. The Forest Protection Act of 1967 gave additional power to the foresters and established a one person special court run by the Divisional Forest Officer. Forestry officers became very powerful through these two Acts.

Many local people living near forests in Nepal have long depended on the forests to fulfil their subsistence needs. They have sourced fuelwood, fodder, timber and poles for house construction, and NTFPs for medicine and as a source of cash income, from forests. Forest management by the Forest Department that excluded local people was clearly inappropriate, yet legislation had enabled the Forest Department to ignore the voices of local people. This fact was recognised as a serious problem during the preparation of the National Forest Plan in 1976, when local people's participation in forest management and sustainable utilisation was acknowledged as important.

Master Plan for the forestry sector

The shortcomings of the aforementioned forestry legislation was recognised in the formulation of the Master Plan for the Forestry Sector (MPFS), prepared between 1986 and 1988, and approved in 1989. The MPFS provided a 25-year policy and planning framework for the forestry sector. The long-term objectives of the MPFS include:

- to meet the people's basic needs for forest products on a sustained basis
- to conserve ecosystems and genetic resources
- to protect land against degradation and other effects of ecological imbalance
- to contribute to local and national economic growth.

The MPFS envisaged a large community forest programme, for which it gave high priority. Some of the important highlights of the MPFS in relation to the community forest programme are:

- all the accessible hill forests of Nepal should be handed over to user groups (not to the *panchayats*) to the extent that they are willing and capable of managing them
- the priority of community forests is to supply forest products to those who depend most on them
- the women and the poor should be involved in the management of community forests
- the role of forestry staff should be changed to that of extension service providers and advisors and forestry staff should be provided with reorientation training so as to deliver the services needed by the Community Forest User Groups.

Decentralisation of forest management

Recognition of the shortcomings of the centralised system of control that characterised the early decades of forestry in Nepal catalysed a process of decentralisation in forest management. New management arrangements that engage a wide array of stakeholders are a feature of contemporary Nepalese forestry. Local people have an important role to play in community forest management, leasehold forest management and collaborative forest management.

Community forest management[3]

In the last 25 years of community forest implementation, about 1.1 million hectares or 25% of the national forests have been handed over to 13,300 Community Forest User Groups (Kanel 2004). The user groups constitute about 35% of the country's total population. The group model of participation of local people in forest management is also applied in watershed management and buffer zone management, where the conservation of watersheds and the preservation of biological diversity are prime objectives.

Leasehold forestry programme

The Forest Rules (1995) have made special provision for the transfer of degraded land as leasehold forest to poor people. User groups are formed among those households who live below the poverty line: the poverty line is defined as a per capita income of less than Rs 2,500 per year and land ownership of less than 10 *ropani* (0.5 hectare). Usually, the group will constitute about 10 households. Small and degraded forestland is handed over to the group and the member households are able to plant trees, fodder crops, medicinal and aromatic plants. The objectives of the pro-poor leasehold forestry programme are the:

- development of degraded lands through the process of land management and plantations
- development of on-farm income generations activities through the cultivation and the sales of seeds, grasses and bamboo, and off-farm income generation activities such as bee keeping
- supply of industrial raw material and the development of eco-tourism.

[3] Community forest management is discussed in detail under the heading "Community forestry" under the Forest Act (1993) and the Forest Rules (1995).

As per the Forest Rules (1995), leasehold forest management plans have to be approved and handed over by the Ministry, but recent guidelines have delegated this authority to the regional director. Leaseholds are given for up to 40 years. Leasehold forests for the poor are free of any lease fee, but industrial leaseholders have to pay an annual fixed amount to the government.

The leasehold forest programme is supported by the Agricultural Development Bank, which provides credit, and the Department of Livestock Services, which provides assistance with animal husbandry. Animal husbandry provides most of the income of the people participating in the pro-poor leasehold forestry component.

Collaborative forest management

The concept of collaborative forest management in Nepal originated as a solution between two approaches to forest management, namely community forest management and conventional state management. In April 2000, the Ministry of Forests and Soil Conservation put forward the policy of collaborative forest management as a way to manage national forests in the changing context of participatory forest management through the involvement of local people and local level political units.

The "Collaborative Forest Management Guideline 2060" issued by the government defines collaborative forest management (CFM) as "sustainable forest management where forests are managed by government and stakeholders collaboratively as per the approved forest management plan for livelihood, economic and other multipurpose benefits maintaining ecological balance."

In CFM, the three principle stakeholders are the central government represented by the District Forest Office, the local government represented by District Development Committees and the Village Development Committees, and local users. Non-governmental agencies will also have important roles to play supporting various activities, such as the management of NTFPs and the marketing and processing of forest products.

CFM is planned to be implemented in the Terai, where there appears to be a large potential for productive forest management. Presently, the Livelihood Forestry Programme funded by the UK Department for International Development, and the Biodiversity Sector Programme for Siwaliks and Terai supported by the Dutch Directorate-General for International Co-operation are assisting the Ministry in implementing CFM. The Livelihood Forestry Programme is being implemented in three districts of Western Terai and the Biodiversity Sector Programme is being implemented in eight districts of central Terai.

Benefit sharing in CFM among the main stakeholders is organised as follows:

- Local users obtain the non-commercial forest products either free or charged as per the decision of the CFM user groups.
- After paying royalty to the government, NTFPs can be sold but the income obtained must be kept in the account of the CFM groups.
- Fuelwood and timber from the forests will be sold through auction.
- Government will keep 75% of the income and the users, the District Development Committees and the Village Development Committees will receive 25% collectively. The sharing of this 25% will be decided by the District Forestry Co-ordination Committee.

Leasehold and Collaborative forestry are relative new forest management arrangements that will continue to require further fine-tuning. Both systems have experienced a variety of problems. According to the Forest Act (1993), community forests have priority over leasehold forests, but this has served to sometimes discourage local people from securing the proposed leasehold forests. There is also no legal mechanism to form leasehold forest groups comparable to community forest groups. Moreover, the leasehold groups do not benefit financially from protecting existing trees on the leased land because the Department of Forests owns these trees.

Collaborative forest management is an even newer programme and is still in the piloting phase. Lessons learnt from the present model have yet to be fully compiled. The benefit-sharing arrangement under collaborative forest management is being contested by the Federation of Community Forest Users of Nepal, as the benefits to the local communities are smaller than those from the community forests.

Implications of the Local Self-Governance Act (1999) for forestry

In addition to the separate programmes discussed above, decentralisation in forestry is being promoted through the Local Self-Governance Act which was enacted in 1999. Most significantly, this Act legally endorses the concepts of local self-governance and devolution. From the perspective of good governance, the strengths of the Local Self-Governance Act include: that the Act requires compulsory representation of women (20 percent) in local government and representation of the deprived and disadvantaged groups through nomination; that provisions exist for councils, committee systems and audit committees, which should increased accountability and transparency in local government; and that participatory, bottom-up periodic planning is compulsory for all local governments.

The Local Self-Governance Act has important implications for forest management. When the Act becomes fully operational, local governments will be responsible for the management of natural resources in their area of jurisdiction. This will require their participation in processes associated with community forest management. The government has begun to form District Forestry Coordination Committees (DFCC) and Village Forestry Coordination Committees (VFCC) so that local governments can contribute to formulating forestry programmes in their respective areas of jurisdiction. This approach will be tried as a pilot programme under the second phase of the Natural Resource Management Sector Assistance Programme (NARMSAP).

Local governments are constrained, however, by a lack of financial resources to become completely independent from the central government. Moreover, the authority of the line agencies and that of local governments is so far unresolved in many sectoral areas including forestry. There are some 23 Articles in the Local Self-Governance Act whose stipulations conflict with other Acts. In some cases, the Local Self-Governance Act, as a "special act", must give way to other Acts that give authority to the line ministries. A good example is the Forest Act (1993), which allows the central government to directly hand over a part of the national forests to local communities. Full implementation of the Local Self-Governance Act will not be possible until those provisions in other Acts that it conflicts with are amended.

Community forest management

Evolution of legislation to support community forest management

The National Forest Plan of 1976 was the first major government statement that mentioned people's participation in forest management. As per the recommendation of this plan, the Forest Act of 1961 was amended in 1977 making provisions to hand over part of the government forests to local political units called "*panchayat*."

In accordance with the amendments of the Forest Act in 1977, the Panchayat Forest Rules and the Panchayat Protected Forest Rules were brought forward for implementation in 1978. The Rules officially initiated the community forest programme in Nepal. Under the Rules, forest land without trees were handed over to local *panchayats* (the smallest political unit) as Panchayat Forests and those with trees as Panchayat Protected Forests. To propel the community forestry programme

forward, the government set in place several community forestry projects. The largest of these was the World Bank financed Hill Community Forestry Project, which was operational in 38 hill districts. Box 1 lists the major features of the community forestry programme as spelt out in the Panchayat Forest Rules and the Panchayat Protected Forest Rules.

According to the revised legislation, after the forestland was handed over to the *panchayat* the community was required to conduct a variety of tasks to manage the forests in a sustainable manner. The community was expected to:

- sow seeds and plant seedlings
- protect and maintain the forest
- implement a "scientific" forest management plan prepared by the concerned forest division in consultation with the panchayat
- protect the forest products from theft and smuggling
- protect the forest against fire hazards
- protect the forest from girdling, lopping, resin tapping, debarking or any other kinds of damage
- stop removal of stones and gravel, soil or sand from the forest area.

As a first step towards community forest management in a country where forests had been managed exclusively by the State, some shortcomings of the two sets of Forest Rules were to be expected. Forests were not handed over to actual users, but rather to the *panchayats*. Local people did not feel that they were the owners of the forests and were thus not inspired to protect them. The village leaders working in the *panchayats* also did not have a strong sense of ownership, because they were elected for five years and most of the forests were too far for them to monitor. Moreover, because the forests were highly degraded, there were no initial benefits or incentives for long-term management

Community forestry under the Forest Act (1993) and Forest Rules (1995)

The Master Plan of the Forestry Sector (1989) proposed that the actual users of the community forests should have the rights of management and utilisation. The restoration of multi-party democracy in 1990 also helped in setting this new direction. The new Forest Act of 1993 and the Forest Rules of 1995 gave absolute right to local people to manage their community forests. The focus of this legislation is on institutionalising Community Forest User Groups (CFUGs) as independent and self-governing entities, nationwide expansion of community forestry and providing utilisation and management rights to the local community. The legislation also attempted to limit the role of the district forest officer to that of supporter, facilitator, monitor and regulator of community forests. The main features of the new community forestry legislation are listed in Box 2.

Box 1 Features of the community forestry programme as detailed in the Panchayat Forest Rules and the Panchayat Protected Forest Rules, 1978

- *Government forests would be handed over to local panchayat, which was considered to be an effective representative of the local people.*
- *Only degraded lands were to be handed over; not well-stocked forests.*
- *The forest area should be within the boundary of the panchayat it was handed over to.*
- *The ceiling on the size of forests to be handed over was up to 125 hectares (500 ropani) for Panchayat Forests and 500 hectares (10,000 ropani) for Panchayat Protected Forests.*
- *Revenue would be shared between the government and the "managers" (the panchayats). For Panchayat Forests, the local panchayat would retain all the income, and for Panchayat Protected Forests, the local panchayat would receive 75% of the income and the government would keep the remaining 25%. Some expenditure in forest development work was mandatory.*
- *The authority of handing over the forests was vested with the Regional Director of Forests.*
- *The price of the forest products sold must not be less than the per unit government royalty rate.*

Box 2 Main features of community forestry spelt out in the Forest Act in 1993 and the Forest Rules in 1995

- *Any part of government forests can be handed over by the District Forest Office (DFO) to the communities, who are the traditional users of the resource. Only the right of forest management and use is handed over to the users, not the ownership of the land.*
- *Government forest can be handed over to the CFUGs irrespective of the size of the forests and the number of households in the group.*
- *Local forest users are organised into groups (CFUGs), which are legitimised as independent, voluntary and self-governing bodies by the DFOs. CFUGs have their own charters (constitution) of incorporation.*
- *The handing over of national forests as community forests has priority over their handing over as leasehold forests.*
- *CFUGs have to manage the community forest as per their constitution and operational plan, once these have been approved by the DFO.*
- *CFUGs are recognised as independent and self-governing entities with perpetual succession.*
- *CFUGs are allowed to plant short-term cash crops including NTFPs.*
- *CFUGs can fix prices for forestry products under their jurisdiction.*
- *CFUGs can transport forest products under their jurisdiction to anywhere in the county.*
- *CFUGs can accumulate funds through grants, sales of forest products, fines and other sources of income. The funds can be used for any type of community development work that the CFUG wishes to invest in.*
- *CFUGs can amend operational plans by informing the DFO.*
- *In the case of forest offences, CFUGs can punish their members according to their constitution and operational plan.*
- *If the management of a community forest deviates from the operational plan, resulting in damage to the forest, the DFO should withdraw the forest from the respective CFUG. The DFO must return the forest back to the CFUG after the problem has been dealt with and a new CFUG committee has been formed.*

Community forestry as a means to alleviate poverty in the Ninth and Tenth Plans

The original objectives of community forestry were to conserve forests and restock the degraded areas. The Master Plan of the Forestry Sector (1989) explicitly defined the objectives of the community forestry programme as to conserve forests and meet the basic needs for forest products of the forest users. However, the Ninth Plan identified community forestry as playing a dynamic role in contributing to poverty reduction, not only by meeting the basic need for forest products of poor people, but also by generating income and employment, and by meeting the demand of forest-based industries for raw material. According to the Ninth Plan, community forestry had to broaden its scope through the development of surplus forest products for sale, the generation of income for poverty reduction and by meeting the basic needs of the local people.

The focus of community forestry for poverty alleviation was further strengthened in the Tenth Plan, which has two sectorial objectives. The first of these is sustainable management and conservation. This includes the sustainable supply of forest products and environmental preservation through conservation, management and enterprise development. The second sectorial objective is poverty alleviation. This includes creating employment and income opportunities through participatory approaches for the poor, women and disadvantaged groups. Table 2 lists the specific targets for community forestry described in the Tenth Plan.

Table 2: Major Targets of the Tenth Plan for Community Forestry

COMMUNITY AND PRIVATE FOREST DEVELOPMENT	TARGET	
	NORMAL CASE	LOW CASE
Community Forestry User Group Formation	2500	2500
Operation Plan Preparation and handing over	3000	3000
Operational Plan revision	4000	4000
Forest Management Support to user groups	2500	2500
Silviculture demonstration plot establishment and operation	500	425
Forest enterprise development for poverty alleviation	500	500

Source: HMGN (2002)

Implementing community forestry

The process of handing over forests to communities involves the following major steps. Firstly, the local community living near the forest sends a letter of interest to the DFO expressing their desire to manage the forest. Once the DFO receives the letter of interest, it dispatches a ranger (forest technician) to help the community in identifying the traditional users of the forests in order that no household is excluded from the user group. The ranger also helps the users to prepare the constitution of the user group.

Once all households are identified and the constitution is prepared, the users have to apply to the DFO according to the format spelt out in the Forest Rules (1995). The constitution of the user group must include the objective of forest management, the rights, duties and responsibility of the user group, forest protection measures and fund utilisation measures. Once the user group and their constitution is officially endorsed by the DFO, the registration certificate is given to the group as proof of group formation.

According to the need of the users and depending upon the productivity of the forests, the users prepare an operational plan that spells out how they will manage the forest. The local ranger helps them in this process. Preparation of the operational plan is a very critical process for the users because it will provide them with a management structure and identifies their benefits from the forests. An operational plan will include the objective of forest management, a rough map of the forests, the division of compartments and various silvicultural prescriptions. The annual yield must be estimated to complete the operational plan. Once the operational plan has been finalised, the users apply to the DFO for approval and the handing over of the forest. After approval has been given, the users have to manage the forests and utilise forest products according to the operational plan. The user group can later amend the operational plan by informing the DFO of the changes they desire.

Monitoring of community forest management and use

Silvicultural operations of community forests are monitored by the DFO, but due to the increasing number of user groups and their forests, it is becoming difficult for the DFO staff to monitor the forests adequately. According to Clause 33 of the Forest Rules (1995), CFUGs have to maintain a record of forest products used by the group members. In the case of selling surplus forest products to outside user groups, three copies of the receipts of the sale have to be maintained. The first copy is presented to the corresponding buyer, the second copy is given to the local DFO and the third copy has to be retained in the office records of the CFUG. As per Clause 35 of the Forest Rules (1995), forest products sold by CFUGs can be transported from the site of sale to anywhere within the country. In the case of timber sale and transport, the concerned CFUG has to inform the District Forest

Office of the details involved. While transporting the sold timber, the CFUG is required to use its hammer mark on the timber for identification, as per Clause 36 of the Forest Rules (1995).

Cost and benefits

CFUGs have to bear the entire cost of managing their community forests. These costs include the costs of arranging and participating in the CFUG meetings and assemblies, the cost of conducting silvicultural operations and the cost of participating in various training programmes. The CFUG retains all the benefits in the form of forest products, for example, timber, fuelwood, fodder, grasses, medicinal plants and other NTFPs. Other benefits of forest conservation are related to the broader ecological and environmental functions of forests. For example, forests play an important role in carbon sequestration and are valued for their biodiversity. Benefits from forest conservation also include improved water quality and more stable river hydrology, that is, less frequent flooding and lower flood levels. In the light of these and other positive externalities of forest conservation, investment by the government in terms of service provision for community forestry makes good economic sense.

The community forests are financially sustainable in their present context as all the financial costs are borne by the local community, who in turn enjoy the entire benefits from product utilisation. All CFUGs combined generate an income of more than Rs 747 million per year (Kanel and Niraula 2004). About 82% of the total income is derived from forest products, which are sold to the users at nominal prices and to outsiders at market prices (Kanel 2004). Other sources of income include grants from government and non-governmental organisations, membership fees, fines and forest entrance fees. The CFUGs spend about 28% of their income on forest protection and management, 36% on community development activities, about 3% on pro-poor programmes and the rest is used for operational activities (ibid.). Users dedicate about half a million-person days equivalent to the assembly meetings, the protection of the forests and on silvicultural operations (ibid). These statistics provide insight into the scale and vitality of the community forestry programme.

The community forestry programme has had significant benefits for the ecological integrity of Nepal's forests. As reported by many projects, there is a substantial visual improvement in the greenery of the hills of Nepal (Kanel 2004). Total growing stock has increased, regeneration has improved and forest fires have been reduced (Branney and Yadav 1998). The improvement in forest condition has resulted in an increase in infiltration capacity, an improvement in ground water recharge and a decrease in surface runoff. At least in some locations, these gains have resulted in a decrease in soil erosion and an improvement in the productivity of the neighbouring agricultural lands. Improvements in the ecological conditions of the forests have also resulted in the reappearance of bird and animal species that had become scarce in some localities. Because the "midhill" zone is under represented in the protected area system of Nepal compared to other ecological regions, the community forests have an important role to play in conserving threatened plants and animals in the midhills.

Governance of community forestry

The major actors involved in community forestry are:

- **The local community :** This includes all local people who are concerned with the management and use of community forests. Communities are not homogenous, however, but consist of many sub-community interest groups. Communities will include the elite or community leaders, who are set apart from the remainder of the community by their wealth and authority. Another subgroup consists of the poor households, who depend upon forests and wage-labour for their livelihoods. Further divisions within this group are female-headed households and lower castes.

- **The District Forest Office:** The DFO is potentially a very powerful actor as it approves the operational plans of the community forests. It also has the legal authority to establish CFUGs and monitors the implementation of operational plans. The DFO is expected to give technical feed back to the user groups, although it has serious limitations due to the increasing number of CFUGs.
- **Local NGOs:** Local NGOs have assisted CFUGs to prepare operational plans, undertake income generation activities and in linking CFUGs with other service providers. NGOs are also assisting with technical tasks such as preparing operational plans. Thus, although the legislation has not given them specific roles, NGOs are fulfilling crucial functions. The success or failure of community forests may depend (unintentionally) to a large degree upon the performance of supporting NGOs.

The Forest Act (1993) and the Forest Rules (1995) do not mention how CFUGs should make decisions. The community forest operational guidelines emphasise that decisions are to be made by CFUGs through consensus. In order to make the decision-making process more effective and equitable, the Joint Technical Review Committee (2001) has recommended that two members from each household, one woman and one man, should participate in their respective CFUG. However, as the participation of two members from each household seriously imposes on other household activities, households commonly send only one member to the CFUG meetings.

From the perspective of good forest governance, a number of notable achievements in community forestry can be observed. The Forest Act (1993) and the Forest Rules (1995) are considerable legislative achievements. The legislation gives full authority to user groups to manage community forests as per the operational plan prepared by the CFUG and approved by the DFO. The legislation has thus played an important role in bringing decision-making regarding forest management and use much closer to the users of forest resources than previously.

The legislation not only recognises the rights of local people with respect to community forests, it also specifies the duties of local people in conserving their forests. Out of the total labour contributed by local people to community forestry, 42% was on community forest protection, 19% was on meetings and assemblies and 19% was on forest product harvesting (Kanel and Niraula 2004). The total participation of user groups in community activities is estimated to be 2.5-million person days per year, which can be valued at roughly Rs 164 million (ibid.).

The CFUGs themselves are strong local institutions. There were 13,300 CFUGs in June 2004 (Kanel 2004). Networks of CFUGs have been established at the Range Post level, the District level and at the national level. The Federation of Community Forest Users Nepal has networks of user groups at different levels, while the Nepal Federation of Forest Resource User Groups has been created to empower forest users at the grassroots level. These networks also serve as pressure groups for promoting good governance within the community forestry programme. CFUGs can also serve as important social capital for government line agencies to promote local development other than forestry. Already some community forest user groups have contacted and built relationships with a variety of agencies to gain service delivery associated with soil conservation, livestock and horticulture.

About 7.7 million people (35% of the population) are involved in community forestry and about 165,000 local people are working as committee members. Some user group and committee members have received various types on subjects including silviculture, gender equity, record keeping and governance. This training has strengthened the local capacity of the CFUGs and as a result group members have been elected to different positions of the District Development Committees and the Village Development Committees.

Before the initiation of community forestry in Nepal, foresters were viewed by forest users as adversaries. The local people were afraid of the foresters. But, with the implementation of community forestry over the last 25 years, the attitude and behaviour of many of the staff of the Depart-

ment of Forests appears to have changed. This has significantly lowered tensions between local people and local forestry officials.

Under-representation of the poor, women and disadvantaged groups in the CFUGs

Although there has been progress towards good governance in community forestry, the poor, women and disadvantaged groups are underrepresented in the CFUGs. Although the Master Plan of the Forestry Sector mentioned involving at least one-third women in forest development activities, only 25% of the executive members of the CFUGs are women. Similarly, involvement of the poor and other disadvantaged groups is at low level, though efforts to increase their participation have been rewarded with some success. There are now approximately 600 CFUGs operated only by women.

Thus far, the decisions of CFUGs are not as conduce to weaker sections of the communities as was anticipated. The village elites and wealthy individuals (those who usually possess land and livestock) tend to enjoy most of the benefits from community forests (Kanel 2004). The operational plan of many CFUGs makes no mention of the collection and sale of NTFPs, which can be an important source of income for poor households. CFUGs are generating income from community forests by selling forest products and this income is being used for operating schools and health posts, constructing and maintaining irrigation channels, and to fund other community development projects. However, such services and infrastructure may have little benefit for the poor, because their children do not attend school, they do not benefit from irrigation as they are landless and they cannot afford to go to health posts when a family member falls ill. The government is aware of this problem and is in the process of formulating guidelines in consultation with CFUGs and their federations so that at least 25% of the group income is spent on pro-poor activities.

Even if the poor seek to participate in decision-making forums, their voices may be ignored. Local people consider positions on the CFUG committees to be prestigious; hence, they are reluctant to surrender these positions (Mahajan et al. 2004). The Federation of Community Forest Users (FECOFUN) feels that legal awareness programmes are necessary to reduce the dominance of the elites in the CFUGs and conversely to increase the participation of the poor, women and disadvantaged groups (Chapagai 2004).

Community forestry activities are labour demanding. CFUG members are involved in a variety of activities to conserve and improve the community forests including cleaning, pruning, thinning, weeding and protection activities. It is the poor and otherwise marginalised groups who are expected to perform these "voluntary" labour-intensive activities. Community forestry has added to the weekly burden of the poor (Pokharel and Nurse 2004).

Another concern is that the local forests have been protected under most of the community forest schemes. The operational plans have required closing the forests and protecting them against burning, grazing and theft. Closing the forests denies access to those who need them most, that is, the poorest households.

A case study of a CFUG in Siraha district shows that there can be a big gap between what the poorest users need and what the CFUG committees decide. Timilsina et al. (2004) studied how one CFUG committee had decided to use the CFUG fund to establish drinking water facilities in the village. Rich and powerful people had fixed separate taps for each of their households and were even using drinking water for irrigation. Poor and marginalised households have only a single common tap between them and the supply of water is inadequate. Poor households were allowed to cultivate aromatic grasses in the community forests, but the committee imposed a 25% levy on total gross income. As a result, poor households have not benefited from the sale of the products. Facilitators were able to foster some improvements in decision-making through an action learning process. The gap between the users and the user committee was reduced by making the *tole* (hamlet of community households) representatives deal with the committee. Firewood was initially sold at Rs 50

per quintal for all households. After the facilitators had assisted in raising equity issues, the price was reduced to Rs 25 per quintal for poor households and it was agreed to provide the firewood for free to the poorest households. Poor medicinal plant cultivators were also exempted from the 25% levy (Timilsina et al. 2004).

Similar observations were made by Pokhrel and Nurse (2004) with regards to the Nepal Swiss Community Forest Project. Poor people's access to resources had been reduced in community forests under this project. Poor households had not received adequate opportunities for training, they had not been provided with adequate loans from the group funds and physical infrastructure constructed using group funds had been of most benefit to the better-off households. A study carried out in Pyuthan District on the benefits received by different classes of farmers from the extraction of NTFPs such as leaf litter, grass, thatch grass and fuelwood found that poor households had received fewer benefits due to their lack of land and livestock holdings (Arun 2004).

The Ghorlas CFUG is presented as a case study to illustrate what *can* be achieved when good forest governance is practiced in community forestry.[4]

CASE STUDY

The Ghorlas community forest user group

The Ghorlas community forest covers 27.64 hectares and is located in the Myagdi district of western Nepal. The forest is located at 1,600 to 2,200 meters altitude and faces the east. The forest has a variety of trees including Chir pine, walnut, Rhododendron and Schima Castonopsis. NTFPs include the bark of lokta, which is used to make paper, and many medicinal and aromatic plants. The forest also supports wild animals such as deer, leopard and the common pheasant.

The forest was handed over to local people in 1994 and is now managed and utilised by 130 households that comprise the Ghorlas CFUG. The members of the CFUG represent a range of social groups. *Chhetris* are the major group followed by *Brahmins*. Occupational castes known as *Kami* (blacksmith) and *Damai* (tailor) are also represented. Most of these members are illiterate. The main livelihood of the CFUG members is subsistence agriculture. Besides agriculture, some user group members are involved in small business, livestock keeping, carpentry, masonry, weaving clothes and making products from bamboo. Some members are priests. On the basis of income and economic standards, the CFUG has classified its members into four groups: (a) very rich, (b) rich, (c) poor, and (d) very poor. These categories account for 16%, 21%, 41% and 22% of households, respectively.

The Ghorlas CFUG committee consists of a chairperson, a secretary and regular members. One third of committee members are women or from disadvantaged groups. The entire committee is elected for two years from the CFUG assembly. The Ghorlas community forestry programme is implemented through the participation of as many households as possible. The CFUG assembly endorses the operational plan and member households participate in finalising the annual plans. Information boards, letters, posters and pamphlets are used for communication among the members.

Forests products are harvested according to the operational plan and are distributed according to member's needs. The forest is regenerating successfully and is completely free from grazing, fire and theft. Seedlings of fodder, fruits and medicinal plants are raised in a nursery located inside the forest. The CFUG has planted cinnamon and asparagus, and various medicinal plants including *xanthozylum*. The user group has also established a demonstration plot of NTFPs and keeps animals

[4] All data presented in this case study are taken from Ghorlas, CFUG (2004).

for improved breeding. The group implements the community forestry programme in partnership with district line agencies involved in agriculture, livestock, irrigation and health.

In addition to managing the community forest, the CFUG is involved in community development, institutional development and various income generation activities for poverty reduction. It has supported the health centre and the livestock service centre by providing furniture and medicine, and it has assisted the local school in procuring and maintaining laboratory equipment. In partnership with local NGOs, the CFUG has constructed drinking water facilities, walking trails, irrigation canals and toilets.

The major sources of income of the CFUG are the sale of forest products, grants and membership fees from the user households. As of 2004, the user group had Rs 165,000 in its account. Of this amount, 10% was spent on forest development, 14% on institution building, 12% on community development and 64% on income generation activities. The income and expenditure of the CFUG is audited independently on an annual basis.

A system has been established by the Ghorlas CFUG to extend loans to members, particularly for income generation activities. Interest received on the loans is added to the CFUG fund. The loans provided to poor households of category (c) and (d) are more concessional than loans for other members. The loans for poor households range from Rs 2,000 to Rs 5,000 with a grace period of 1 to 2 years. Only a nominal interest rate is charged.

A monitoring committee has been formed to examine whether members have utilised the loans they have received for the purposes specified. The committee also discusses potential problems with households involved in income generation activities and if an enterprise fails due to unforeseen factors, any outstanding debt may be written-off. Table 3 presents the types of income generation activities that have been funded by loans from the CFUG fund, the number of people involved and the total amount invested in each activity.

The CFUG has an emergency relief fund that is used to support members suffering from accidents, natural calamities, difficulties occurring during pregnancy and other unforeseen incidents.

The Ghorlas CFUG is exemplary for its wise management of the community forest, the variety of community development programmes it has supported, its support of community services, the responsible manner in which it has managed its funds and the special support it provides to its poor members. In recognition of these achievements, the Ghorlas CFUG was awarded the national award "*Ganesh Man Singh Ban Samrakshan Puruskar*" in June 2004.

Table 3: CFUG loans to support income generation activities

ACTIVITIES	NUMBER OF PARTICIPANTS	AMOUNT INVESTED (RS)
Making of agricultural implements	4	14,400
Rope weaving	4	4,000
Vegetable seed production	7	10,400
Mushroom cultivation	5	10,400
Bamboo handicraft making	4	4,400
Furniture making	2	5,000
Animal health worker	1	5,000
Revolving fund for loan	20	50,000
Clothes weaving	5	18,000
Saw improvement	2	5,000
Musical tool making	1	3,000
Scholarship for poor students	2	23,500

Recommendations for good forest governance in Nepal

Based on our understanding of the advances made towards good forest governance in Nepal and the remaining challenges, in order to improve forest governance we recommend that:

1 **Pro-poor forestry should be actively promoted:** Government officials, service providers, local user groups and other stakeholders are becoming increasingly aware of equity issues and they are working on pro-poor community forestry. As a result, different community forestry projects, programmes and the user groups themselves are trying to initiate pro-poor community forestry programmes. One way to do so is to involve the poorest households in income generating activities, such as the cultivation of medicinal plants, goat-rearing and other locally feasible livelihood options. These activities can be supported through low interest loans drawn from the user group fund. Another option is to allocate a part of community forests strictly to the poorest households. This would improve their capacity to negotiate with the elites of the CFUGs.

2 **Strategies to promote more representative decision-making within CFUGs must be found:** Although the Forest Act (1993) and the Forest Rules (1995) recognise that all users irrespective of class and caste have equal rights in the CFUGs, in practice elites dominate decision-making and capture most of the benefits. It is very difficult for disadvantaged groups and poor households to participate in CFUG decision-making processes. Some argue that these processes are participatory up to a certain point, but are also exclusionary with regard to the involvement of weaker social groups. However, participation without representation is not possible. Therefore, even if weaker social groups find it difficult to express their concerns at CFUG meetings, their representation in the decision-making process is a step forward. The next challenge lies in building their confidence so that they are able to put forward their concerns regarding access to, and use of, community forests.

3 **Programmes to raise awareness of legal issues amongst the poor, disadvantaged groups and the CFUGs should be made widely available:** All the community forestry projects and programme documents, the Ninth Plan (1997-2002) and the Tenth Plan (2002-2007) clearly mention forestry initiatives for poverty alleviation. However, this has been hampered by the lack of legal awareness amongst the poor and disadvantaged groups. In order to steer the community forestry programme towards a pro-poor orientation, programmes to raise awareness of government policies, legal rights and responsibilities should be initiated at the local level, especially targeting the poor, women and lower castes. Raising legal awareness of the CFUGs is also necessary. Shrestha et al. (2004) found that stone quarries had been illegally established in five of the 31 CFUGs they studied.

4 **Funding for local governments to carry out their new responsibilities with regards to community forest management must be secured:** When the Local Self-Governance Act (1999) becomes fully operational, local governments will be required to contribute to the management of the national forests. Local governments will be involved in programme formulation, monitoring, coordination, conflict resolution and other activities. At present, however, many are constrained by a lack of funds to carry out their new responsibilities. A percentage of the community forest income could be allocated to the local government to ensure a much-needed, long-term source of income for the local governments. This could be justified on the basis that only a proportion of the local population benefits directly from community forestry and that local governments could use the income from community forestry to fund services that benefit other sections of the population. However, this could also serve as a disincentive for communities to invest in community forestry; hence, caution is required.

5 **"Distant users" should be included in the CFUGs:** Especially in the Terai, traditional users of the forests live far from the forests. Nevertheless, forests are an important source of livelihood for many "distant users." New settlers now surround community forests. Finding an arrangement that can accommodate both distant users and new settlers in the management of community forests has become a challenging issue. Considering the traditional practices and rights of distant users, they should also be encouraged to become CFUG members.[5] This will help them secure their rights in relation to the community forests.

6 **CFUGs should be considered as an important social asset during times of conflict:** The Communist Party of Nepal (Maoist) has waged an armed rebellion against the establishment for the past eight years. CFUGs have found that they cannot regularly conduct their meetings and sometimes feel that it is too dangerous for them to enter their forests. About 33% of the operational plans could not be renewed, because inventories of the community forests could not be conducted. It is also becoming increasingly difficult for forest officials to work in the field in areas where conflict occurs. Although the mobility of CFUG members in areas of conflict may also be constrained, they are better able to negotiate with different stakeholders and power holders at the local level, as they have close relations with them. The CFUGs are generally viewed more positively by the insurgents than government officials and donor supported NGOs. The CFUGs can thus be considered an important social asset during times of conflict that forestry officials should enlist to improve forest management.

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4

FOREST GOVERNANCE IN CAMBODIA

The Emergence of Community Forestry

Sokh Heng[1] *and Henry Scheyvens*[2]

[1] Forestry Administration, Cambodia (sokhhengpiny@yahoo.com).
[2] Forest Conservation Project, IGES (scheyvens@iges.or.jp).

Introduction

Forest governance refers to those who make decisions over forest resources and those who benefit from the decisions. Conversely, the structure of forest governance will determine if certain groups are powerless or excluded from the benefits. In a country in which poverty is widespread and its causes deeply entrenched in the socio-political fabric, the people of Cambodia can ill-afford the unsound management of forests.

Establishing good governance in the forestry sector is a difficult task. The country has suffered a great deal during two decades of civil war and foreign occupation. Forests are central to the livelihoods of rural communities, but the voices of these communities have been marginalised in the contest over forest resources. High rates of deforestation have compromised the ecological and environmental services of Cambodia's forests, while undermining local livelihoods and perpetuating systems of weak governance.

In this chapter we outline the state of Cambodia's forests, the challenges facing forest governance and recent reforms the government and its backers have undertaken to improve the way forests are managed and utilised. We examine the emergence of community forestry as an alternative to the predominant concession and plantation systems, finding that formal involvement of communities in forest management offers one way forward for the forestry sector.

Country background

Cambodia, a tropical country in South-east Asia with a total area of 181,035 km^2 and a population of more than 13 million, borders Thailand in the north-west, Laos in the north, Viet Nam in the south-east and the Gulf of Thailand in the south. Wetlands surrounding the Mekong River and Tonle Sap Lake comprise almost one-third of the land area. Highlands include the Dangkrek Mountain escarpment along the Thai border, the Elephant and Cardamon mountain ranges in the south-west and part of the Annamite range in the east. Cambodia's geography incorporates a 435 km coastline with extensive mangrove forests.

Cambodia has experienced an extremely turbulent history. About 90 per cent of the population consider themselves to be Khmers who enjoyed greatest influence during the tenth and thirteenth centuries

when the Angkor Empire was at its peak. Minority ethnic groups include Chinese, Vietnamese, hill tribes, Chams and Laotian. The Khmers suffered a long period of decline due to attacks by the Thai and from present-day Viet Nam by the Cham, before the king of Cambodia requested that the nation be placed under French protection. Full independence in 1953 did not bring the liberation and prosperity that was anticipated. After a protracted five-year struggle, the country was taken over by the Khmer Rouge communist army under Pol Pot in 1975. A regime was established to promote a radical interpretation of socialism (Chandler 1996) by forcing the urban population into the countryside, collectivising agriculture, outlawing religion, confiscating private property and abandoning or nationalising industry. After numerous border clashes, the Viet Nam army entered Cambodia in 1978, forced the Khmer Rouge to seek sanctuary in the countryside and occupied the country for the following ten years. Viet Nam eventually withdrew its army, a parliamentary democracy was established through the 1991 Paris Peace Accords, and in 1993 the UN-sponsored democratic elections were held. This was a difficult time: "The 1990s saw precarious, unsettled populations, with many returning from refugee camps; the opening to a market economy; insecurity of land tenure; land grabbing and numerous land conflicts without effective institutional means to resolve them" (UNHCHR 2004, 3). In 1993, Cambodia's Constitution was adopted as the supreme law of the country. It established liberal democracy and a multi-party system as the overarching form of governance. As part of a broad programme of "decentralisation and deconcentration," Cambodia held its first commune elections in 2002 to select chiefs and members of 1,621 commune councils. In 2003, Cambodia elected its third coalition government in a relatively peaceful setting. Recent national elections have been described by the international community as free and fair, and the country is enjoying a period of relative peace and stability after some twenty-five years of war and unrest. The challenges to state building remain daunting, however, as the period of civil war and occupation fostered a political climate in which power more than policy determined the outcome of competition over limited resources.

Cambodia has adopted free market economic principles, but civil violence and political infighting have constrained efforts to improve productivity. Moderate economic growth since 2000 was stimulated by expansion in tourism and in the garment manufacturing sector which employs a quarter of a million people. The garment sector has thrived through the US-Cambodian Bilateral Textile Agreement which gives Cambodian exporters a guaranteed quota of US textile imports and is unusual in that it provides an incentive for improving working conditions.

Corruption is considered rife and combined with fears of renewed political instability deters domestic businesses from developing long-term investment strategies and continues to deter foreign investors. Growth has tended to be focused within urban areas and has primarily benefited the middle and upper social strata, yet the economy remains primarily dependent on agriculture. Above 80 per cent of the population base their livelihoods on subsistence agriculture and rely heavily on natural resources. Productivity in agriculture is low (even below levels achieved in the late 1960s), only partly because most cultivated soils are of poor quality (ibid.) Even the booming garment industry will face serious challenges with the WTO requiring that US preferential treatment ends.

With a score of 0.571, Cambodia ranked 130 out of 177 countries in the human development index in 2003, only slightly up from 0.533 in 1995 (UNDP 2005). In 2003, life expectancy was 56.2 years, the adult literacy rate was 26.4 per cent, 45 per cent of children under the age of five were estimated to be under weight (1995-2003) and 77 per cent of the population were living on less than USD 2/day (1990-2003) (ibid.). About two million rural households have an average landholding of approximately one hectare (USAID 2005, 4) The judicious management and utilisation of Cambodia's natural resources are thus both necessary to meet the immediate pressing daily needs of much of the population and to contribute to long-term sustained economic growth.

Overview of Cambodia's forests

Cambodia shares a wealth of forest resources with neighbouring countries. Indeed, it has one of the world's highest populations to forest area ratios. With a large number of key habitats and high species diversity, the conservation of Cambodian forests has international significance. Cambodia contains extensive tracts of some of the remaining forest formations in continental South-east Asia.[3] Within these formations are a wide variety of plant communities that contain a high presence of endemic species and are thus likely to be of significant conservation value. Cambodia forest cover consists of diverse types including mangroves, flooded forests, coniferous forests, dry deciduous and moist deciduous rainforest or moist evergreen forests, moist mountain forests and dwarf evergreen forests. Evergreen and deciduous forest formations are predominant. This diverse forest cover represents a variety of ecosystems containing a rich assortment of valuable natural resources.

Forests in Cambodia have special importance in the development of the state and society, particularly because the country must find ways to rebuild itself after emerging from a long period of trauma and internal unrest. While forest resources contribute to the livelihoods of much of the population and could be the basis for a vibrant processing and export industry, they have been used to finance insurgency and forest management has been plagued by inadequate controls.

The principle causes of forest loss since the early twentieth century are land clearance, logging and fuelwood collection. In the early part of the twentieth century a limited amount of forest encroachment took place in areas most suitable for agriculture. Logging for commercial purposes and fuelwood were added to encroachment as significant causes of forest degradation in the middle of the century. Forest loss was generally restricted to the forest margins until the end of the 1990s, when extensive unregulated commercial exploitation took place. Illegal logging associated with the concession system flourished because of the small number of forestry staff responsible for monitoring huge concessions, the overcapacity of the mills and a lack of alternative livelihoods for local people and, in particular, the military. The high demand for timber in nearby countries further encouraged illegal trafficking of timber and other forest products.

Before 1970, forest covered about 73 per cent of the total land area (Savet and Sokhun 2002). Forest cover has been degraded progressively to about 58 per cent of the land area (ibid.). The World Bank estimates that from 1973-1997 deforestation occurred at annual rates of 1-2%, or a loss of 100,000 hectares per year (World Bank 2003, 3). About half of the forests withdrawn from concessions are degraded (IFSR 2004, 73). Data collected by the Forestry Administration indicates that the forest cover has increased to about 61 per cent, but this is most likely attributable to the method of measurement, as opposed to an actual increase. Most evidence, including recent satellite images produced by the Japan International Co-operation Agency, points to a continuing decrease in forest cover (Table 1).[4]

Dependence on forests for much of the population ranges from meeting daily living requirements for food, medicine, fuel and building materials to income-generating activities such as manufacturing charcoal and resin-tapping.[5] Most rural dwellers cultivate rice once a year as their main crop and supplement their diet with fish, other aquatic resources and forest products (USAID 2005, 4). As the landless can at least fish and/or collect forest products, "Cambodia's natural resources not only provide a foundation for food security, income, and employment for most of the population, but also an essential "safety net" for the rural poor" (McKenney and Tola 2002). However, with over half of the current population under the age of

[3] Ecosystem types and characteristics are described in more detail in ICEM (2003).

[4] A thorough ground check is necessary to verify the exact extent and quality of forest cover. Given the current limited budget allocated to the forest sector, this task may take years to achieve. It is also critical that areas of state forest land are properly delineated, demarcated and registered, though there are no funds available to implement such activities at this time.

[5] As much as 90 per cent of the population uses wood or charcoal for fuel (World Bank 2003, 5).

Table 1: Change in forest cover by forest type from 1992-2002 (hectares)

CATEGORIES	1992	1996	2002	% CHANGE
Evergreen	4,042,435	3,990,972	3,720,507	-8.0
Mixed	1,517,964	1,507,302	1,455,095	-4.1
Deciduous	4,368,984	4,281,485	4,833,135	10.6
Bamboo	32,209	33,715	28,951	-10.1
Inundated	349,303	335,297	314,288	-10.0
Mangrove	77,244	72,457	65,277	-15.5
Forest Plantation	72,354	82,472	67,000	-7.4
Forest Regrowth	435,353	374,178	619,142	42.2
Total forests	10,895,846	10,677,878	11,103,395	1.9
Total Wood and Shrubland	2,203,546	2,058,455	286,952	-87.0
Total forest and other wooded land	13,099,392	12,736,333	11,390,347	-13.0

Source: FAO (2005).

nineteen, the competition for natural resources will continue to increase. Natural forests are diminishing and reforestation activities are very limited; the figures in Table 1 suggest that plantation cover actually declined from 1992 – 2002. Moreover, local people must now compete with networks of politicians, businesses, military personnel, officials and other rent seekers for access to and benefits from forest resources.

The problems in Cambodia's forest sector require urgent attention. If the situation remains unchanged, much of the forests and forest lands in Cambodia will be cleared and converted for other purposes (Figure 1) in a manner that is clearly not in Cambodia's short or long-term interests. The government has taken positive steps to address some of the major forests management problems, but difficult challenges remain.

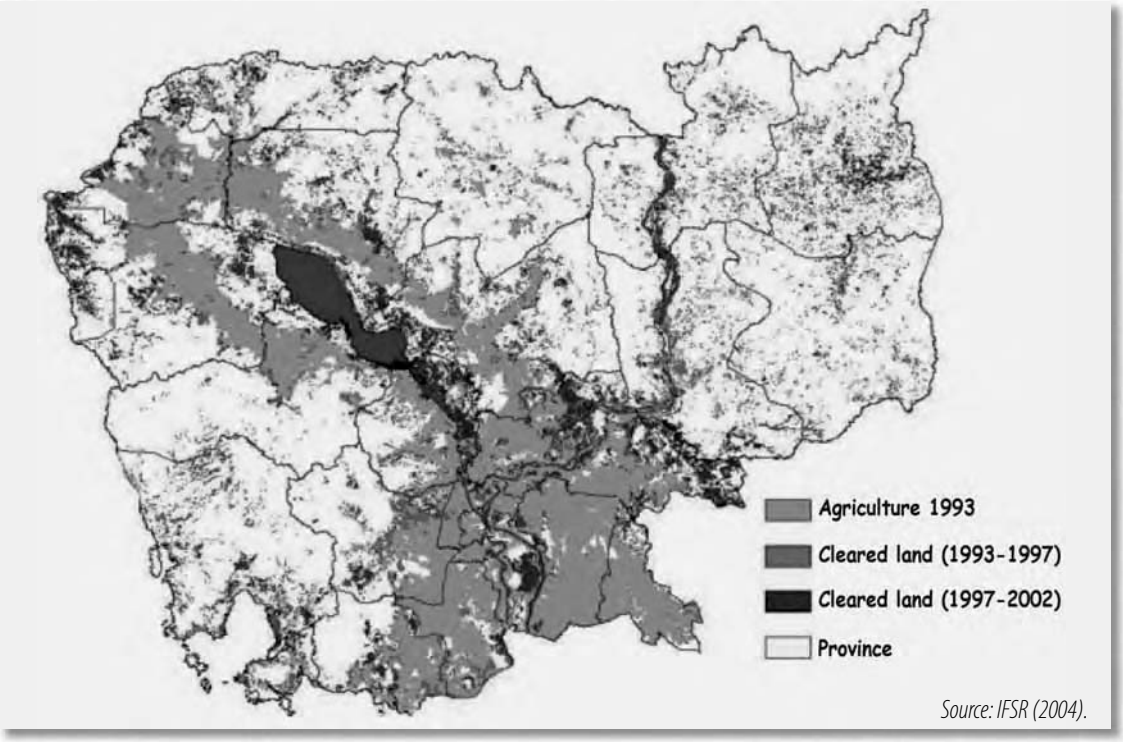


Figure 1: Forest cover changes (1993 - 2002)

Forest management

Forest management in a state of transition

Before 1970, the forests of Cambodia were not under severe threat. The management system was adopted from the French colonial period, where areas were classified according to their intended use as production forest, wildlife sanctuaries, research forest areas and preservation forest areas. In the period between 1970 and 1979, Cambodia was embroiled in a destructive civil war and over the subsequent decade the country was under the influence of foreign countries. During these two periods, formal forest management did not mature. Moreover, a tightly controlled economy based on a central planning model meant limited development in the forestry sector. Forest exploitation during the 1980s was undertaken primarily to finance the military and to secure territory.[6] The relative inaccessibility of the forest resources limited exploitation, with harvests estimated at between 500,000 and 1,000,000 cubic metres per year.

Circumstances changed dramatically in the first half of the 1990s with the introduction of large-scale, private logging concessions and the rise of international environmental NGOs and international development agencies as important players in Cambodian forestry. The concession system became the primary mechanism of forest management by the state and, despite critical reviews, was promoted by the major donors as the most effective way to manage forests as productive units. As the concession system expanded, so too did the complaints of the international environmental NGOs decrying the loss and degradation of Cambodia's forests.

The forest concession system was launched to reduce illegal logging and to promote forest-based development (Ministry of Environment 1998). Most forest concessions were introduced in the early 1990s. At its peak, a total of more than thirty concessions covered some 6.5 million hectares of forests, or more than half of all forest lands in Cambodia. In 2001, a moratorium on logging was called and the government cancelled most of the concessions. The remaining twelve concessions are still valid but the government has ordered a halt to forestry operations, demanding that the concessionaires prepare long-term strategic plans that incorporate consultation and environmental and social impact assessments.

Progress in recent years has included the establishment of the Forestry Administration, reforms in legislation, the Statement of the Royal Government on National Forest Sector Policy and the setting up of independent monitoring systems. With the establishment of the Forestry Administration a new model of forest management is emerging.

The government has been developing policies and implementing programmes that focus on:

- The development of forest management plans consistent with international standards of sustainable forest management;
- Local community participation in forest management;
- The eradication of illegal logging activities; and
- The development of land use management procedures for utilising cancelled forest concession lands.

The government is attempting to establish a forest management system based on a combination of strong central authority control, with decentralised decision making at the local level. This is sought through the new Forestry Administration structure that creates a clear hierarchical line of control from the central down to the local level.

The administrative structure is set up with national level authority, four regional inspectorates, cantonments that follow provincial administrative

[6] One example was the felling of trees along the Thai border to construct a heavily mined strip of "no man's land," with the objective of stopping Khmer Rouge forces from returning (UNHCHR 2004, 12).

boundaries, divisions that follow district administrative boundaries and triage level offices that follow commune administrative boundaries. This system is designed to bring responsibility and accountability together under one line of control. As the capacity of the local level units continues to grow, especially at the cantonment level, greater decentralisation of decision making within the Forestry Administration can occur. The triage (the lowest administrative unit) will become the interface from which all forest activities are managed. Responsibility and accountability will be more closely linked with the inspectorates responsible for monitoring and the triage staff responsible for enforcement and other operational activities (Forestry Administration 2004).

A review of the forest sector was commissioned by international donors and the Cambodian government in 2004. The review was carried out by the government's Joint Co-ordinating Committee and the Working Group on Natural Resource Management as part of the national forest programme process. The review team consisted of overseas consultants and care was taken to ensure that the output would be independent of all relevant stakeholders. The review provides the most complete and up-to-date set of information on the forest sector in Cambodia.[7] It is likely that the review will lead to further positive changes in forest policy as the current Technical Working Group on Forest and Environment is formulating the national forest management plan based partly on the results of the review. The changes in forest management under the new system are indeed significant, but they will only succeed if substantial funding can be secured.

Reform of forest policy

The government adopted the Statement of the Royal Government on National Forest Sector Policy, developed with assistance from the Cambodia-German Forestry Project, on 26 July 2002. The objectives of the reform initiatives spelt out in the statement are:

- The conservation and sustainable management of the country's forest resources shall achieve maximum contribution to the sustainable socio-economic development of the Kingdom of Cambodia;
- The remaining forest resources of the country shall be considered as permanent forest estate and managed by exclusively promoting conservation and sustainable forest management schemes that directly contribute to the rehabilitation and conservation of a maximum stock of forested land and forest resources;
- Within the conservation and sustainable forest management schemes, maximum involvement of the private sector and participation of the local population shall be achieved in order to ensure food security, poverty reduction and socio-economic development;
- A wide range of coordinated multi-stakeholder processes shall be implemented enabling the harmonisation of the different perceptions, interests and objectives of the various forestry interest groups at all levels; and
- Promotion of forestation on arable land and protection of those trees for the development of forest resources will be continued (RGC 2002).

In response to these objectives, the government has taken action to improve the performance of the forestry sector by passing the Forest Law in 2002,[8] restructuring the old Department of Forestry and Wildlife into the Forestry Administration, passing sub-decrees on community forest and wildlife protection, and enacting rules for the demarcation and delineation of the permanent forest reserves.

The Forestry Administration, as part of the government's rectangular strategy for development (RGC 2004), recently identified the following action items and principals for the effective management of the forestry sector:

[7] The review has been cited extensively in this chapter.
[8] See Syphan (2003) for a description of the Forest Law.

Forest resource conservation

- To reclassify and dedicate the major part of the remaining natural forest stands to their environmental protection and biodiversity conservation functions;
- To promote conservation and protection strategies such as protected forests, watershed management, genetic and wildlife resources conservation and eco-tourism with maximum participation of the local population;
- To strictly implement the harvesting code of practice as a regulatory framework for the sustainable management of forest resources and forest concessions; and
- To conduct extension, education and public awareness campaigns at all levels of Cambodian society.

Good governance

- To implement capacity building, institutional strengthening and research programmes at all levels;
- To conduct education, training and public awareness campaigns, in particular, regarding the participation of the local population within conservation and sustainable forest management schemes;
- To establish a Forestry Administration in which the necessary steps of devolution of decision-making power can take place, and in which functional procedures for multi-institutional collaboration are grounded;
- To encourage, implement and coordinate multi-stakeholder processes enabling the harmonisation of the different perceptions, interests and objectives of the various forest interest groups at local, regional and international levels; and
- To promote the efficiency and transparency of information flow within the forest sector.

Socio-economic development

- To promote the high socio-economic value of forest ecosystems, and protection and biodiversity conservation functions of natural forest resources;
- To promote the substitution of timber supply from natural forest stands by timber plantations through the encouragement of private investment and public participation; and
- To optimise the use, processing and marketing system for forest products, especially plantation forest products, to adequately support domestic demand and export.

Poverty reduction

- To legally recognise and protect the traditional rights of the local population to use forest resources under the framework of food security and poverty reduction considerations; and
- To optimise the benefits to the local population from the use and management of forest resources through the implementation of the concept of forestry and wildlife conservation based on the participation of the local population.

Forest governance: Arrangements and actors

To understand the potential of the reforms in forestry legislation, administration and policy requires knowledge of the key actors in forestry, their motives, interrelationships and relative power. In addition to the formal networks of actors officially responsible for managing forest resources, informal networks of local, provincial and national power holders that have sought to further their advantage through forest exploitation also exist (DANIDA undated, 5). Global Witness (2004) describes these as "opaque patronage networks that substitute for a system of governance." International actors, including funding agencies and NGOs, can be added to the list of individuals and organisations that are described by the Independent Forest Sector Review (2004) as the "nexus" that shapes how forests are utilised and managed.

The forest governance nexus are ad hoc, often opaque networks of actors with shared interests (ibid.). They can be grouped as:

- At the local level among business, bureaucracy, military and commune chiefs. Their common interest is in maximising the rent that they can obtain from the forest resource;
- At the national level among business, politicians and senior bureaucrats; and
- At the international level, among donor agencies and NGOs with a shared interest in conservation or national development (IFSR 2004, 31).

The broader historical context in which forest governance sits can be understood as follows:

> *When land is being grabbed, resources over-exploited or villagers and business people requested to pay 'unofficial fees' on local trade, officials or rogue groups of military or other armed personnel is [are] frequently involved. Combined with the hierarchical structure of the Cambodian government and the absence of a strong rural civic society, this means complaints 'from below' about ill treatment will often be received by forces near the root of the problems. This reflects a century's old tradition by which patron-client relations dominate governance and in which the public offices and the state itself are mainly seen as a tool for rent-seeking for the individual and the power-holding networks (DANIDA undated, 6).*

The informal networks thus consist of local actors seeking to establish and gain advantage from patron-client type relationships and, more recently, donor agencies and international NGOs that must engage local actors to pursue their own objectives.

Within the formal arrangements are several key ministries and government entities that have a stake in forest lands and resources. These include the Forestry Administration, the Ministry of Agriculture, Forestry and Fisheries, the Ministry of Environment, the Ministry of Land Management, Urban Planning and Construction, the Ministry of Industry, Mines and Energy and the Department of Mineral Resources. Each has its own policy framework and set of rules for the management and use of forests.

The Department of Forestry and Wildlife was renamed the Forestry Administration under the Forest Law and a *prakas* issued on 13th September 2003. This restructuring was a response to the failure of the Department of Forestry and Wildlife to control the unsustainable exploitation of forests. The Forestry Administration is effectively the implementing arm for the Ministry of Agriculture Forestry and Fisheries (MAFF) in the forestry sector. It is now in charge of most forest lands in Cambodia.

At the central level, the Forestry Administration is structured around ten offices and three organisations. With its new structure, the Forestry Administration has a streamlined role of providing strategic support and technical guidelines to the local forestry offices, which include four inspectorates, fifteen cantonments, fifty divisions and 170 triages. Forestry staff are expected to closely interact with the local community in all aspects of forest management and utilisation at the triage level. As a response to illegal activities in the forestry sector, a forest crime monitoring unit has been established within the Forestry Administration.

The Ministry of Land Management and Urban Planning and Construction was established under a 1999 sub-decree at a time when land issues had become widespread. Cambodia's first Land Law, adopted in 2001, replaced a 1992 decree that only covered property. The legislation sets out a classification system for public and private land. The mandate of the ministry covers land affairs, urbanisation, construction, land tenure and geography. The ministry has played key roles in the decision-making process to clarify state lands, including those of forests.

The Ministry of Environment, another newly established government agency, is responsible for the protection of the Cambodia's natural resources and the prevention of environmental degradation. It is mandated to advise relevant ministries on the

conservation, development and management of natural resources. The Ministry of Environment has the Department of Nature Conservation and Protection as its implementing arm, especially for the management of protected areas and wildlife sanctuaries.

The Ministry of Industry, Mines and Energy was established in 1999 by a sub-decree. As its title suggests, it is mandated to manage the industry, mines and energy sectors. Through coordination with MAFF and the Ministry of Environment, the ministry has the authority to issue permits for mineral and soil extraction within the forest lands.

In addition to the key ministries, international donors—multilateral and bilateral—play a significant role in Cambodia's forestry sector. This must be understood in the broader context of Cambodia's political evolution; one in which outside intervention has been critical. The sponsorship of the democratic process by the United Nations and its supporters has given international actors a considerable amount of leverage in shaping the country's policies. The large volumes of aid provided to Cambodia further enable outside actors to exert pressure. Cambodia's free market policies are allied with the economic interests of Cambodia's major backers, but slow progress in reforming governance has caused concern. These dynamics are mirrored in the forestry sector where the most influential international actors are the World Bank, the Asian Development Bank (ADB), the Food and Agriculture Organization (FAO) and major donor countries. The donor Consultative Group, which holds an annual meeting to review the performance in the forestry sector and to decide funding allocation, has placed forestry high on the political agenda and provided a major driving force for the recent reform.

Both international and local NGOs have become important actors in the forestry sector.[9] International NGOs range from largely conservation or development-oriented organisations that will often work through Cambodian NGOs at the local level, to advocacy-oriented organisations. The support from the donors to high profile and advocacy NGOs has often led to unfavourable confrontation with the government agencies. NGOs have accused the government agencies and staff of irresponsibility and a lack of motivation to fulfil their duties. Conversely, the government side views some NGOs involved in forestry as unprofessional and as working for their personal gain. Nevertheless, the international NGOs have played an important role in driving reform of the concession system. Moreover, local NGOs and a variety of village associations are building strength through their engagement with livelihoods, gender, youth and local planning and governance issues. While they are presently less visible than their assertive international counterparts, according to a recent DANIDA report they could become part of mass rural movements if they continue to strengthen financially and institutionally (DANIDA undated, 8).

Much of the work of managing protected areas has been contracted out to high profile international environmental NGOs which sometime largely write the memoranda of understanding (IFSR 2004) that spell out their relationship with the state. From a governance perspective, having goals and priorities set by the NGOs is not conducive to long-term, comprehensive planning for protected areas embedded within a strong sense of state ownership. As in other relatively poor developing countries, the educated middle-class can view international NGOs that offer relatively high salaries as a means to further their careers, at the expense of local institution building. The international NGOs are entrenched within the fabric of forest management in Cambodia to the degree that they have employed the police and military to patrol the protected areas. The Société Générale de Surveillance (SGS) was recruited as the government's forest monitoring unit to observe forest crimes, and Global Witness was contracted as the "independent monitor" of the Forest Crimes Monitoring and Reporting Project.

The most important industry players in the private forest sector in Cambodia are international logging companies and local sub-contractors. These actors became the primary owners of Cambodia's most

[9] USAID (2005) provides a brief description of each of the major actors.

commercially valuable forests under the concession system. During the late 1990s, most lost interest in their concessions after the government banned logging and demanded new forest management plans. The sub-contractors are mostly Cambodian interests run by powerful actors including the military. Smaller players include timber fellers, timber merchants and manufacturers of forest products.

As suggested above, the military is another important actor in the forestry sector. In 1994, the government handed over the control of timber exports to the Ministry of National Defence to fund the war being fought against the Khmer Rouge. The role of the military in logging, which was already substantial, was thus formally legitimised. Demobilisation, including the reintegration of soldiers into communities, is a major national task.

The local communities are the weakest actors in the forestry sector; at least the poorer sections of these communities. While they rely heavily on forest resources for their subsistence livelihoods and for small enterprises, during recent decades they have found it increasingly difficult to access nearby forests because of the allocation of land to concessionaires.

With the variety of actors described above pursuing sometimes separate, sometimes shared interests under both formal and informal governance arrangements, the forestry sector clearly needs a "coherent and overarching policy framework" (IFSR 2004). The existing frameworks do not extend over the entire breadth of forestry concerns and are not directed at the highest level of policy making in Cambodia to adequately link in with the broader national development goals. The Independent Forest Sector Review (2004) argues that this policy requires a single sectoral governing authority with the mandate that covers all types of forest lands, whether under production, protection or indigenous title.

Forest management system

Forest concession system

Most of the debate on the forestry sector has centred on the forest concession system and illegal logging. Before the moratorium on logging, most logs were exported to neighbouring countries. The logging ban imposed by Thailand in 1989 and the destruction wrought on forests by the war in Viet Nam increased the reliance of these two countries on wood from Cambodia. During the 1990s, revenue from the forest sector, most of which was earned through concessions, was viewed as an important contribution to the national budget. In 1995, the export of wood products brought in USD 185 million in foreign revenue and the sale of impounded illegal logs reached USD 20 million (Ministry of Environment 1998). At its zenith, the forest sector employed 37,000 people and accounted for about eight per cent of GDP, a figure that has dropped to less than 0.5% because of the suspension of concessions (IFSR 2004).

Most of the concession holders are foreign-owned companies that have sub-contracted felling and the transportation of logs to the factories of Cambodian operators. Global Witness has described in stark terms the numerous and varied problems that faced the concession system, finding that: thirty-two concessions were awarded secretly in 1995, despite open discussions between the government and donors; concessions were awarded contrary to Cambodia's Constitution; only two of the companies involved had any experience in running forest concessions – "they were merely investors taking advantage of the political instability at the time and their connections to those in power," and; the companies did not provide the government with significant revenues nor undertake the investments they had promised (Global Witness 2002, 3,4).

In 1999, Global Witness was contracted to be the "independent monitor" of the Forest Crimes

Monitoring and Reporting Project, whose purpose is to uncover, probe and suppress forest crimes. As the independent monitor, Global Witness was tasked with auditing government records and assessing whether the Department of Forestry and Wildlife (DFW) and the Department of Inspections under the Ministry of Environment were accomplishing their mandates.

In the second half of 2001, Global Witness submitted twenty-three crime reports, over half of which concerned weak governance in forest concessions. Descriptions of weak governance in concessions were also provided by the World Bank and the ADB.[10] The ADB review of concessions in 1999 found widespread destruction of forests, serious breaches of contracts and harvesting rates that were much higher than permitted by the 25-30 year cutting cycle (ADB 2000). Calling for an end to the concession system, the Independent Forest Sector Review (2004, 28) argued that "there has been a *de facto* assumption that public good is best managed through a public-private partnership (the concession system), where ad-hoc land allocations have defined who the forests are for rather than through an informed publicly chosen process."

By the end of the 1990s, Cambodia's international donors were demanding that sustainable forest management plans be developed and implemented by each concession holder. In response, the Department of Forestry and Wildlife set a deadline of 30 November 2001 for the sustainable forest management plans, which none of the concessionaires met. Most concessions were cancelled.

Legislative and policy reform were undertaken to improve the social and environmental performance of concessions (Kamnap 2003). The Forest Law (2002) outlines the legal framework for concession agreements and management in Cambodia. Concessionaires are required to pay attention to community title and traditional user rights under the Forest Law. The definition of traditional user rights has been widened to embrace all subsistence, non-commercial use and the selling or bartering of non-timber forest products. The Sub-Decree on Concession Management drafted in 1999 prescribes: a forest concession planning, implementation and control system which will lead to balanced, sustainable and technically competent management of production forests; that the process by which concessions are granted and managed is fair and transparent; that concession forest management regimes conserve and protect natural biodiversity, and; regular consultation with, and participation by, local communities and other relevant stakeholders. The sub-decree requires that forest concession management plans follow the technical planning guidelines prescribed in the code of practice for forest harvesting.[11] These reforms may have significance in the future but at present, while the concession system is still officially in operation, in practice it is not functioning.

Community forestry management

In Cambodia, community forestry is supported by the government and various other stakeholders. Community forestry grants forest dependant communities the right to manage and use forest areas and products that they rely on for their livelihoods. Community forestry is designed to harness the local knowledge and skills of those communities who have traditionally managed the forest resources around them. Recent initiatives to support community forestry include approving the Sub-Decree on Community Forestry in 2003, the establishment of the national-level Community Forestry Office within the Forestry Administration and the ongoing formulation of the national community forestry programme, which should be adopted by early 2006.

The Forest Law (2002) recognises community title as spelt out in the Land Law (2001). The Land Law recognises the collective tenure of indigenous communities as a prior claim to land resources. The Forest Law states that the rules for the establishment, management and use of a community forest shall be determined by a sub-decree on community forestry management, and that the guide-

[10] See World Bank (1996) and ADB (2000).

[11] The main species of trees that are harvested are *Dipterocarpus sostatus, Hopea odorata* and *Anisoptera costata*.

lines on community forestry shall be determined by a MAFF *prakas*. The Forest Law gives the Forestry Administration and MAFF the authority to grant areas of production forest in the permanent forest reserves to local communities. The Forest Law requires a community forestry agreement which is valid for a period of fifteen years, and allows for renewal, conditional on satisfactory monitoring and evaluation reports from the Forestry Administration. The Forest Law also requires a community forestry management plan, which is reviewed every five years or earlier if it is considered necessary.

The Sub-Decree on Community Forestry (2003) outlines the basic steps for the establishment and management of community forestry, including key definitions and the roles of various entities. The stated objectives of the sub-decree are:

- To implement the Forest Law (2002) and other legislation regarding local community management of forest resources;
- To define the rights, roles and duties of the Forestry Administration, responsible authorities, community forestry communities and other stakeholders involved in community forestry management;
- To establish procedures to enable communities to manage, use and benefit from forest resources, to preserve their culture, tradition and improve their livelihoods;
- To ensure user rights for the community under a community forest agreement;
- To support the Royal Government of Cambodia's policies of poverty alleviation and decentralisation;
- To provide an effective means for community forestry communities to participate in the reforestation, rehabilitation and conservation of natural resources, forest and wildlife;
- To enable citizens to understand clearly and recognise the benefits and importance of forest resources through the direct involvement in forest resources management and protection; and
- To provide a legal framework to assist Cambodian citizens living in rural areas in establishing community forestry communities to contribute to the sustainable management of forest resources.

The national community forestry programme is intended to outline the current status of community forestry in Cambodia, identify current problems and weaknesses, highlight priority recommendations and outline actions that should take place over the next five to ten years, depending on stakeholder support. It will essentially be a policy document for implementing the Sub-Decree on Community Forestry.

The Community Forestry Office has identified more than 200 community forests. Some of these forests have not been properly established, with, in many cases, little more than a group of people calling themselves community forestry groups leading the process. The extent of the forest areas are largely unknown as many projects are in the planning stages and/or are seeking to establish community forests within concession areas. The existing community forestry sites are as yet merely pilot sites that have not been formally recognised under the provisions in the Community Forestry Sub-Decree. Consequently, there is a variety of approaches to community forestry at different sites. Although the existing community forestry areas are important to communities and may impact on a large number of people, there is currently little production of forest products from these areas. The products harvested are primarily non-timber forest products such as fuelwood, rattan, bamboo and mushrooms.

Forest plantation

Large-scale industrial plantations are not yet a significant feature of the landscape in Cambodia. Their number is growing, but not without controversy. While advocates argue that plantations can be an important source of foreign revenue, reduce pressure on natural forests and provide employment, they are troubled by many of the same problems that affect logging concessions.

Land concessions for economic reasons can be granted under the Land Law for the purpose of agricultural commercial exploitation. These

"economic concessions" include plantations mainly of teak, eucalyptus rubber, oil palm and coconut trees (UNHCHR 2004). The Land Law provides a lease of up to 99 years for a maximum of 10,000 hectares on state private lands. This limit does not apply to state public lands and concessions of over 100,000 hectares that have been granted the status of "forest plantations" by MAFF under the Forest Law.[12]

A report by the United Nations Cambodia Office of the High Commissioner for Human Rights (UNHCHR) found that "at the local level the activities of the concessionaires often have serious social, economic, and cultural consequences leading to the dispossession and impoverishment of local populations, and sometimes giving rise to considerable conflict" (UNHCHR 2004, 4). The UNHCHR concurred with the findings of the Independent Forest Sector Review that land concessions have been used to gain access to valuable commercial species in natural forests:

> *The stories underlying conversion are complicated and often focused on gaining access to the valuable timber crop on the land to be converted. Commercial plantation agriculture has played a significant role in forest conversion via economic concessions. These concessions have been allocated through a secretive process. Local people with prior claims (legal or otherwise) to these lands have had their entitlements removed and are therefore aggrieved. In practice, as a result, a relatively small percentage of the total area allocated to concessionaires has been certified or planted. The main benefit so far to the concessionaire has been the revenue from removal of trees on the land (IFSR 2004).*

More positively, the Forestry Administration supports reforestation efforts through replanting, and encourages people to be involved in tree planting efforts. The administration provides over one million tree seedlings year. The main species currently distributed from government tree nurseries include: *Acacia auriculiformis*, *Eucalyptus camaldulensis*, *Tectona grandis*, *Pinus merkusii*, *Dipterocarpus alatus* and *Hopea odorata*. The tree seedling dissemination programme provides seedlings, free of charge or at very little cost to the local people, for planting around their home gardens, in villages, along roadsides and in temple grounds. This provides alternative sources of fuelwood, income and other environmental services to the local communities. Reforestation is also carried out by the Royal Cambodian Armed Forces with technical support from the Forestry Administration. The Forestry Administration has carried out tree planting in many forest plantation stations including the Kbal Chhay Watershed Protection Forest.

Protected area system

The 1993 Royal Decree on the Creation and Designation of Protected Areas established Cambodia's protected area system. The Ministry of Environment was made responsible for management with the passing of the Law on Environmental Protection and Natural Resources Management (1996). By 2003, twenty-three protected areas covering over 21 per cent of the country were under the jurisdiction of the Ministry of Environment, a figure well above the World Conservation Union (IUCN) minimum country target of 10 per cent. In addition, a new category of protected areas (protected forests) was established and placed under the management of MAFF. There are currently seven protected forests created mainly through sub-decrees, bringing the proportion of total area under forest related protected areas to 25 per cent (IFSR 2004).

The government has shown its commitment to conservation with respect to the total size of protected areas, but this has not been translated into sufficient financial support, making the work of field officers very difficult. In 2001, only 0.18% of national expenditure was allocated to protected areas (ICEM 2003, 9). Governance of the protected area system is troubled by a variety of problems,[13] but efforts are being undertaken to overcome these by engaging local communities. In 2002, the prime

[12] A more detailed description can be found in UNHCHR (2004).

[13] See ICEM (2003) and USAID (2004) for further details. Global Witness (2004) gives a detailed description of "institutionalised corruption" and illegal logging in the Aural wildlife sanctuary.

minister issued a statement that requires 10-30 per cent of every protected area to be designated as a buffer zone to be co-managed by the Ministry of Environment and local communities. The Ministry of Environment and MAFF are now both trialling decentralised community management structures.

A comprehensive country study on protected areas identified the following issues that need to be addressed for improved governance and natural resource management in protected areas:

- New capacities and skills in local communities and government;
- New methods for information gathering, analysis and sharing;
- A system of local development planning based on the concept of one plan for one area which all sectors respect;
- New and innovative structures for community involvement in natural resource management; and
- Innovative local funding structures which allow funds raised locally to be managed and used locally (ICEM 2003).

Where forests are not managed

Forestry takes place in areas not formally recognised for this purpose. Indeed, more "informal forestry" takes place than formally recognised forestry (IFSR 2004, 73). Informal forestry is practiced largely in deciduous forests generally considered to be of low commercial value and forests that were once under concessions, many of which are degraded. Timber from the former concession areas supplies most of the domestic market. While the extraction of forest products commonly takes place without permits, this may be overlooked by officials because the activities are important for local livelihoods. This informal forestry is open to abuse by rent seekers; the gains to local producers are diminished by a nexus of powerful business, political, military and official interests all claiming a share (IFSR 2004). Despite its importance to the domestic economy and livelihoods, informal forestry does not take place within a long-term national strategic planning framework.[14]

CASE STUDY

Community forest

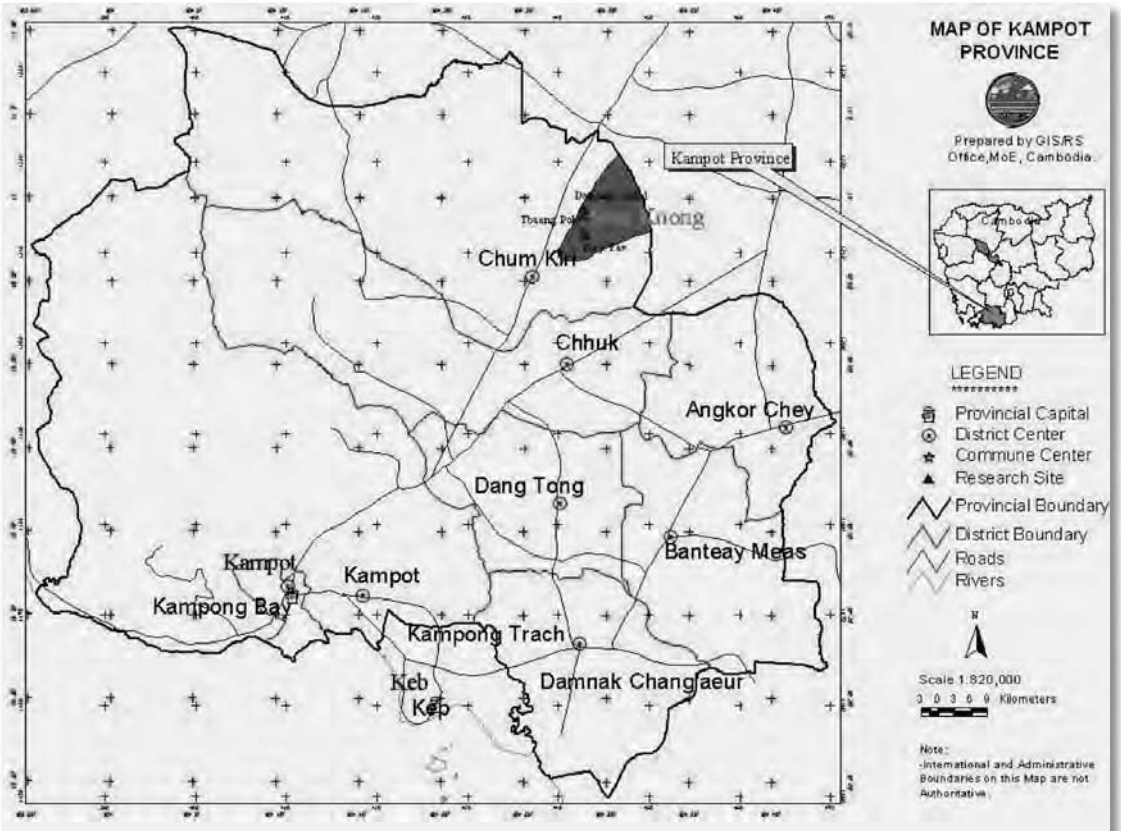
Community forestry was introduced as one possible alternative to the forest concession system. This section provides an example of one of the many community forestry projects now under implementation in Cambodia[15]. Some stakeholders, particularly the Forestry Administration, NGOs and international donors, are optimistic about community forestry. Models are still under development, but show promise.

Background

The Narktar-thmorpoun community forestry project is located in Chum Kiri district, Kampot province (Map 1). It was initiated under the Community Forestry Research Project in early 2001. The Kampot provincial governor signed the community forestry regulation on 19 December 2001. By 1997, about 71,000 hectares of land (72.89%) of the forest area in the district had been degraded. The forested area is mainly on hilly land. Species include *Dipterocarpus turberculatus*, *Dipterocarpus obtusifolius*, and *Shorea obtusa* (mostly on the hilly land), bamboo (mostly in the lower areas near the river) and mixed species (especially in the mountainous areas).

Before 1970, the forests in this area were rich in large trees with a 40-100 cm diameter. According

[14] This discussion draws on the Independent Forest Sector Review (2004).
[15] This section draws on Chum Kiri Team (2002 & 2004) and Department of Natural Resource Management (2003).



Source: GIS/RS Office, Ministry of Environment, Cambodia (undated).

Map 1: Map of Kampot province

to the village elders, valuable and luxury woods, including *Pterocarpus pedatus*, *Afzelia xylocarpa*, *Dalbergia bariensis*, *Xylia dolabriformis*, *Shorea obtusa*, *Dipterocarpus alatus* and *Anisoptera glabra*, existed. The forest was also abundant in non-timber forest products such as fruits, vegetables, mushrooms, potatoes, green bamboo, rattan, rubber, herbal medicines and some varieties of wildlife. In the 1980s, Chum Kiri could still be described as a mountain range rich in forest and other natural resources. In 1998, the forests were seriously depleted by illegal logging. Forest land-grabbing activities for private ownership have altered the state of the forests from semi-evergreen to degraded forest. There has been a sharp decrease in the availability of forest resources; the remaining forest is largely regenerating with a tree height of 4-5 metres and a tree diameter of 10-15 cm. The loss of forest cover led to the depletion of wildlife species, erosion and sedimentation of rice fields. The depletion of timber used for house construction has forced the local communities to log in distant areas. They must spend 1-2 weeks away from their villages and risk contracting malaria.

Community forestry in Chum Kiri

Chum Kiri was the first project site to be jointly selected by the core team of the government's Community Forestry Research Project. This team is comprised of national level representatives from the Forestry Administration, the Ministry of Environment and the Forestry Science Faculty of the Royal University of Agriculture, and at the provincial level from the Provincial Forestry and Wildlife Office and the District Agriculture Office. The team began its field activities after site selection in early 2000. The Narktar-thmorpoun community forestry was established with the voluntary participation of people in three villages: Prey Yav, Tbeing Pouk and Damnakchnoul (Figure 2). The forest covers a total of 992 hectares.

Experience over the past three years has shown that the development and implementation of the project has been smooth and effective. The Narktar-thmorpoun community forestry initiative involves the following actors:

Villagers - community forestry management committee

As in other community forestry projects, the villagers have had to participate throughout the planning process. The planning process included participatory rural appraisal to uncover the socio-economic features of the area, the availability and local demand for forest products and the problems and the strategies for forest management (Chum Kiri Team 2000). Other steps included the preparation of the community forestry by-law and regulation, the establishment of the community forestry management committee, the formulation of an agreement between the state and the community forestry management committee and the drafting of the community forestry management plan.

The community forestry management committee comprises nine members: chairman, vice-chairman, secretary, accountant and regular members. The election of this body consisted of each of the three villages selecting three representatives (one woman) through direct voting. The nine members elected the chairman, vice-chairperson, secretary and accountant from amongst themselves. Other positions were allocated based on the number of votes counted. The committee has a term of five years.

Commune council

The commune council has an important role to play in the project, especially in facilitating all community forestry activities. The commune council helps find solutions to questions and problems raised by the management committee regarding forest boundary demarcation and takes part in monitoring and evaluation. That the commune council officially recognises the community forestry management committee is also important for the committee to become a legitimate body.

Local forestry staff

Throughout the planning process, the local forestry staff played an important role in providing technical support to the community forestry project. They assisted the working group by participating in the community forest inventory and in formulating the five-year forest management plan. They also conducted extension work focusing on the importance of forests, the Forest Law, the Sub-Decree on Community Forestry and related legislation.

Community Forestry Research Project and Cambodian Development Resource Institute

The staff of the Community Forestry Research Project have a critical role to play. The research team has facilitated all the planning processes as well as implementation. Together with local forestry staff, they have assisted the local community in finalising the community forestry management plan. Most of the planned activities are being carried out with the financial support of the Cambodian Development Resource Institute.

Decision-making process

Within the community forestry project, four types of decision-making involving local people can be identified.

Decision-making to develop the community forestry regulation

The Sub-Decree on Community Forestry Management requires that community forestry regulations are passed by the management committee on the use and management of the community forest consistent with the management plan, including rights of access and duties for community members and secondary users, user fees, benefit sharing, reporting requirements and fines for violations.

In Kampot province, the community forestry regulation was initiated and drafted by the research

team and the management committee based on the ideas of the local community, traditional uses of forests and forest potential. The draft was shared with the local community to allow them to participate in the decision making and for them to find options for implementation and adaptation. While it is thought that males are usually better than females in expressing their ideas in public because of education and tradition, care was taken to ensure that women's thoughts were presented and heard. Women have been elected to the community forestry management committees. Moreover, during the annual meetings women are encouraged to raise their concerns and ideas regarding project planning and implementation.

Decision-making in problem identification and resolution

After the implementation stage, the local communities have identified problems facing community forestry. It is firstly the responsibility of the management committee to seek solutions to these problems, which include land use conflict arising during boundary demarcation. At the annual meeting in 2003, the management committee identified one problem as people coming from neighbouring villages to cut trees and hunt wildlife on community forest lands. The members decided to allow villagers living nearby who had relatives as community forestry members to collect up to thirty stems of bamboo as well as other non-timber forest products.

Decision-making to develop the community forestry management plan

The Sub-Decree on Community Forestry Management states that the community forest management plan is a document prepared by the community with approval from the Forestry Administration. The plan must be preceded by an environmental and social impact assessment and must detail the procedures, regulations and measures related to the sustainable use and management of the community forest. After the approval of the community forestry management agreement, the management committee is required to prepare a management plan with participation of the community members in compliance with procedures stated in the community forestry by-laws. The management committee may request technical assistance to develop the plan from the Forestry Administration, institutions or individuals with skill in community forest management.

The process for the formulation of the management plan is thus the same as for the community forestry regulation. In order to develop the draft plan, the community must conduct a forest inventory and a resource needs assessment. Consultation between the management committee, local people and the Forestry Administration is necessary. In 2003, the management plan for the Narkta-tmorpoun community forest was completed. Two annual meetings have thus far been held to report on the results of the five-year management plan, to organise its continued implementation and to make modifications if necessary. The management plan is to be reviewed by the Forestry Administration every five years or earlier if needed. The Forestry Administration must include representatives of the community forestry management committee in its monitoring and evaluation of the management plan.

Benefit-sharing and achievements of community forestry[16]

There are four sources of income that have been derived from the Narkta-tmorpoun community forest. First, the community forest members all pay a membership fee. This is important as it provides members with a sense of ownership of project activities. The membership fee is also a means to encourage all members to protect and manage their forest resources. Second, visitors to the community forest can make donations. At the time of writing, thirty-two visitors from various organisations had contributed about USD 300 to the project account. Third, fines levied against poachers provide income for the project. Fourth, income is derived from the sale of bamboo and other forest products. The income spent by the local community has been used mainly for com-

[16] See Kaylan (2004) for further information.

munity welfare such as repairing roads, assisting the poorest families and making fire breaks, as well as patrolling and to cover administration and meeting costs.

Neither the Forest Law nor the Sub-Decree on Community Forestry states clearly how benefits are to be shared between the government and the local communities. Within their community, people in the project area have established their own benefit-sharing system. Efforts have been made to avoid disputes and to have transparency. Because the forest is quite degraded, it does not provide a large amount of cash income to all members. They benefit through their rights to collect timber and non-timber forest products for consumption. Features of the community forestry management plan include: poles will be collected for the construction of twelve houses; 4210 bamboo stems will be allocated for family consumption, 300 stems for building a school and fifty stems for a pagoda, and; people living in the vicinity who become members will be permitted to cut thirty stems of bamboo and to collect other non-timber forest products.

In 2003, the whole community agreed that half of the income from the bamboo harvest would go to the local people that had undertaken the harvesting and the other half to the community forestry account. After discussing the plan for future harvesting at the annual meeting, members agreed to increase the benefits to workers by 10 per cent.

The benefits of harvesting non-timber forest products from the Narkta-tmorpoun community forest are not sufficient to meet domestic needs and to improve livelihoods to a remarkable extent. Nevertheless, some significant achievements in community forestry in Cambodia can be observed. At the national level, the Forestry Administration has been working with NGOs to develop community forestry legislation, policies and related documents. The newly approved Sub-Decree on Community Forestry and the associated community forestry guidelines are important achievements. This sub-decree aims at determining rules for the establishment, management and the use of community forests throughout Cambodia. The guidelines are under the final stage of formulation and will provide many of the details needed to implement the sub-decree. Since the community forestry guidelines still require approval, there is as yet no legal framework for the local communities to reach agreement with the government.

At the provincial level, the Forestry Administration has been working with partners to provide technical and financial support to forestry cantonments in planning and implementing community forestry projects. The Community Forestry Office of the Forestry Administration has identified more than 200 community forestry sites. In total, there are nineteen provinces and cities, seventy-six districts, 157 communes and 615 villages involved in community forestry activities. There are some 60,000 households involved, managing about 180,000 hectares of moderately degraded forests. Despite these achievements, community forestry faces the following challenges:

- Many of the local communities who live in and near forests and depend on forest resources for their subsistence do not have a clear understanding of the Sub-Decree on Community Forestry and related laws and regulations.
- Many forestry staff who are supposed to play key roles in developing community forestry on the ground do not have sufficient knowledge and experience.
- Although many community forestry activities have been implemented, research on implementation, field experiences and documentation of lessons learned is lacking.

Despite the number of community forestry projects being implemented, only one community forest was officially recognised due to the lack of community forestry guidelines. To formally recognise existing community forestry sites is an urgent task. Despite the positive reform in community forestry policy, the capacity of forestry staff and the budget to carry out this important work are both inadequate.

Conclusions and policy recommendations

In Cambodia, good governance is critical in the forest sector because so much of the population, especially poor rural households, depend on forest resources for their livelihoods. Cambodia's forests have global significance with respect to biodiversity and, if managed properly, could be an important source of foreign exchange. Conversely, weak governance in forestry significantly depresses the country's prospects for reducing its reliance on foreign aid and constructing a robust state.

The most suitable approaches to forest management in Cambodia will only emerge from experiment and implementation. Rather than relying on conventional forest management systems such as forest concessions and plantations, the shortcomings of which have been highlighted by numerous reports cited in this chapter, community-based forest management should be developed, promoted and supported on a national scale. Millions of hectares of former concession forest areas could be managed under community forestry. Although community forestry is in a nascent stage, communities have shown that they are interested in managing and conserving forests. The benefits to local people of community forestry could ultimately be far greater than other forms of forest management where benefits are eroded by rent seeking.

Community forestry should be promoted in Cambodia, paying consideration to the following points:

1. As the task is beyond the capacity of the government, good co-ordination and collaboration between the government agencies and NGOs supporting community forestry is essential. The Forestry Administration should work closely with donors and NGOs to form a national community forestry working group. This group could comprise senior Forestry Administration planners, interested donors, and competent NGOs to guide and support the development and implementation of a national community forestry strategy.

2. Capacity building at provincial and national levels to support community forestry is necessary. The Community Forestry Office could work with partner NGOs to prepare training materials and develop curriculum as well as a nationwide training programme. The capacity for supporting community forestry at both national and provincial levels can be promoted through cross visits where forestry staff from different levels of administration share their knowledge and experiences.

3. Future community forestry should focus on the development of small forest enterprises to increase the benefits for local communities and to create more incentive for them to participate. Failure to provide economic incentives in community forestry may result in resource depletion and finally the collapse of the project.

4. To successfully introduce small forest enterprises into community forestry requires government agencies to work closely with NGOs and donors to provide financial and technical support to local communities. Low interest loans could be appropriate. Training for the community on producing and processing value-added forests and non-forest products will be necessary. A system to make up-to-date market information available to the community as a basis for planning, harvesting, processing and marketing should be established.

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5

FOREST GOVERNANCE IN THE PHILIPPINES

The Evolution of Community-Based Forest Management

Juan M. Pulhin[1], Mark Anthony M. Ramirez[2] and Perlyn M. Pulhin[3]

[1] College of Forestry and Natural Resources, University of the Philippines (jpulhin@laguna.net, jpulhin@yahoo.com).
[2] Institute of Philippine Culture, Ateneo de Manila University, Philippines.
[3] Dept. of Agriculture, Philippines.

Introduction

In the Philippines, good and effective governance is increasingly being recognised as essential to sustainable poverty reduction. The recent economic crisis brought about by crony capitalism, graft and corruption and inappropriate policies has increased public awareness of how important governance is to sustain economic growth. A new politics of party programmes has emerged, replacing the politics of personality and patronage, and underpinning a process of consultation with actors outside the state apparatus.

The forestry sector has important roles to play in the Philippines in eradicating poverty and stabilising the natural environmental. Resource scarcity has become a driving force for good forest governance. The development of forest governance in the Philippines was anchored in the context of political transformation (Contreras 2000). Major policy reforms over the last decade have led to devolution in forest management. From a highly regulatory, centrally controlled and industry-biased system of forest management, forestry has evolved into a more decentralised, participatory and people-oriented approach. This shift is evident in a variety of policy reforms, all of which have contributed to sustained productivity improvements in the forestry sector and a rehabilitation of the natural environment. Among these policy reforms, community-based forest management (CBFM) has proved a successful mechanism through which to transfer certain forest management rights and responsibilities from the central government agencies to the local communities.

This paper reviews how forest policy evolved in the Philippines in responding to the need to promote the sustainable management and use of natural resources. It traces the trends, causes and consequences of deforestation, and places the current state of forest governance in a broader perspective. Specific attention is given to the emergence and development of CBFM, with the Barobbob watershed provided as a model of forest management. We conclude with policy recommendations to sustain and improve the implementation of CBFM.

The context of forest governance

The World Bank Institute (2002) defined governance as, "the traditions and institutions by which authority in a country is exercised for the common good. This includes: (a) the process by which those in authority are selected, monitored and replaced, (b) the capacity of the government to effectively

manage its resources and implement sound policies, and (c) the respect of the citizens and the state for the institutions that govern economic and social interactions among them." A "forest governance-learning group," an informal association formed by in-country groups in Africa and several of their international partners, relates governance to the way power is organised in society. They view power as being captured in policy, legitimised in law and implemented by institutions. The group described governance as, "who gets to decide who gets what," and they describe it as "good" when it is equitable, accountable and transparent (IIED 2005). In the policy framework of the Macapagal-Arroyo administration, good governance is guided by three interrelated principles: a sound moral foundation; a philosophy of transparency and accountability, and; an ethic of effective implementation (NEDA 2005a).

To promote good forest governance in the Philippines, a wide range of devolution initiatives have been carried out that involve various stakeholders at different levels and scales. At the local level, transformations in forest governance have occurred in recent years with decentralised arrangements ranging from state-cum-corporate forest ownership to simpler joint management agreements between local communities and the government. Aside from these initiatives, a number of groups, including international organisations, have joined forces to promote good forest governance in Asia and the Pacific within a wider social and political framework.

Geography and people

The Philippines is bounded by the Pacific Ocean on the east, the Celebes (Sulawesi) Sea on the south, and the South China Sea on the west and north. It has a total land area of about thirty million hectares and is comprised of 7,150 islands. As of March 2005, the country is geographically and politically subdivided into 17 administrative regions, 79 provinces, 117 cities, 1,500 municipalities, and 41,975 *barangays* (the smallest political unit). The three main island groups are Luzon, the Visayas and Mindanao.

In May 2000, the population was estimated at 76.5 million, with a population density of 255 persons per square km and a growth rate of 2.31% (NSO 2005). Based on the 2000 Census on Population and Housing, in 2005 the population is projected to reach more than 85 million (Inter-Agency Working Group on Population Projections 2005). The languages spoken include: Filipino, English, Spanish, Chinese and eight major local dialects. Most of the population are Roman Catholics (85%) and the rest are mainly Protestants or Muslims.

With a tropical climate, the Philippines has two distinct seasons: a wet season (June-October) and a dry season (November-May). The rainfall is generally abundant with 80% of the country receiving more than 178 cm per year (Garrity et al. 1993).

The 2002 status of land classification from the National Mapping and Resource Information Authority (NAMRIA) identifies 15.85 million hectares as "forest land."[4] Almost one-third of the population, or about 27 million people, lives within the forest zones (Defensor 2004). They are believed to be among the "poorest of the poor," with most of them heavily dependent on the forest resources for their livelihood (FDC 1985; World Bank 1989).

State of the economy

The Philippines is presently enjoying a period of relatively high economic growth. The gross domestic product expanded by 6.1% in 2004 (NSCB 2005a). This growth was attributed to favourable weather conditions, stronger global economic growth in 2004 and government policy and programme interventions.

The output of the agricultural sector grew by 4.9%, being favoured by normal rainfall conditions except during the typhoons in the last two months of 2004 (NSCB 2005a). The government's infrastructure, financial and technical support programmes also played a role in boosting agricultural output. These included the construction and rehabilitation of irrigation and post-harvest facilities, hatcheries and nurseries; the aggressive dis-

[4] Any land sloping at eighteen degrees or above is classified as "forest land." Less than half of this is actually forested.

tribution of high-yielding varieties and hybrid seeds, fingerlings, bio-agents to control pest infestation and fertiliser, and; the provision of financial/credit programmes (NSCB 2005b).

Stronger domestic and foreign demand in 2004 boosted industry and services by 5.3% and 7.3%, respectively (NSCB 2005a). With strong and stable consumer spending and investments in fixed capital, especially in private construction, domestic demand rose at 6.7% (NSCB 2005a). The strong consumer spending was attributed to the growth in rural incomes as both real output and the terms of trade improved. Remittances grew by 11%, reaching 7.7 billion dollars, a figure equal to about a tenth of domestic economic production in 2004 (NSCB 2005a).

The government's fiscal position, although still weak, is improving. The 2004 national government fiscal deficit was P186.1 billion.[5] At 3.5% of the GDP, this was lower than the target of 4.2% (NSCB 2005a). The labour market is faced with high unemployment, averaging 11.3% over 2004, despite growth in the GDP (NEDA 2005b). The moderate growth in GDP does not guarantee ample employment opportunities for all Filipinos because of the rapid population growth that occurred between the 1960s and the 1990s. Roughly two-thirds of the unemployed reside in urban areas. The majority are young people aged between 15-24 years who are unskilled and lack employment experience (NEDA 2005b). While unemployment is more of an urban problem, underemployment is largely a rural issue: 61.2% of the underemployed are rural residents (NEDA 2005b). The need for better income prospects prompts people in the urban areas to migrate to other countries or to move to rural areas. As opportunities diminish in rural areas, residents tend to move to upland locations, resulting in the overexploitation of forest resources.

State of forests

Using LANDSAT Enhanced Thematic Mapper images for 2002 and 2003, the NAMRIA and the Forest Management Bureau (FMB) generated a set of land/forest cover statistics (FMB 2005). The analysis used harmonised land/forest cover terms and definitions in accordance with international standards. Results show that of the total land area of the country, 24% or 7.2 million hectares are forest zones. This figure is up by 11% from that of 1998, when forest cover was estimated at 6.5 million hectares. Both closed and open forest, which cover 2.5 and 4 million hectares respectively, consist of broadleaf, mixed and coniferous stands. Plantations cover about 0.33 million hectares and mangroves cover about 0.25 million hectares.

Out of the 7.2 million hectares of forest cover in 2003, 6.5 million hectares were found within "forest zones," while the remaining 0.7 million hectares were in "alienable and disposable" (A&D) lands. Areas in the forest zones that have not been logged and those logged over areas whose vegetation has reached the closed canopy stage are classified as "closed forest." "Open areas," on the other hand, include areas logged by timber license holders, forests affected by timber poaching and areas destroyed by fire and forest disturbances.

Areas within the forest zones that have remained intact as a result of the ban on the cutting of mangrove species pursuant to the Republic Act No. 7161 comprise the mangrove areas. The plantation areas are those covered by integrated forest management agreements (IFMAs), socialised IFMAs (SIFMAs), agro-forestry farm lease agreements (AFFLAs), tree farm lease agreements (TFLAs) and community-based forest management agreements (CBFMAs), and plantation/reforestation projects established by the government in compliance with the terms and conditions of licenses/lease agreements. Private tree farms within A&D lands, which are usually small landholdings, are also plantation areas.

In terms of forest stocks, the Philippines experienced a dramatic drop of resources during the period 1988 to 1994. The major causes for this decline were identified as logging activities and the conversion of forestland to non-forest use. Harvesting and logging activities accounted for P48.6 billion in losses in forest stocks during the reference period (NSCB 2005a). The country lost resources worth P20.4 billion due to land conver-

[5] USD1 was approximately P (Philippines Peso) 55 in November 2005.

sion (NSCB 2005b). From being a major supplier of timber to the international market, accounting for 30% of the timber traded internationally in 1965 (Thompson, 2001 cited by Defensor 2004), the Philippines has found itself among those countries that are net importers of wood materials.

Evolution of forest policy and the causes of rapid deforestation

Unless upland pressure is significantly reduced and sound forest management is implemented, the contribution of the Philippine's forests to national welfare will be further undermined. Forest resources continue to be lost and degraded by, *inter alia,* high deforestation rates, adjustment inefficiencies brought about by the partial devolution of the management of the environment and natural resources to local government units (LGUs), and unstable and unpredictable government policies.

About two-thirds of the population are dependent on subsistence farming and fishing. They have been forced to adopt destructive resource use practices to deal with the unfavourable economic conditions. This situation is worsened by the uncertainty in resource use due to conflicts between alternative land and water uses: for example, the maintenance of large portions of forestlands as protected areas and ancestral domains tends to conflict with current efforts to revive the mining industry. Moreover, competing interests between biodiversity conservation and the maintenance of ancestral domains tends to divert attention from more pressing concerns, such as further resource depletion.

The present efforts to promote the sound management and conservation of the forest resources, if not useless, are inadequate to arrest forest degradation. There seems a need for stronger collaborative arrangements that would bring together local users, governments, non-governmental organisations, international agencies and other stakeholders to encourage a shift towards more effective, equitable and legitimate systems of forest governance.

Evolution of forest policy

Before the Spanish colonisers entered the Philippines, land ownership was generally communal. The Spanish promulgated royal decrees that centralised the control and management of land and natural resources under the state (Borlagdan, Guiang and Pulhin 2001; Sajise 1998). These royal decrees allowed for the provision of timber for Spanish civil and naval needs, the generation of government revenue and the perpetuation of the forests (Boado 1988). When the Regalian Doctrine was introduced, the indigenous communities were deprived of their traditional rights to own the land and to benefit from the forest resources (Borlagdan, Guiang and Pulhin 2001). Lowland forestlands were converted into agricultural crop plantations when only a few "privileged" individuals were granted the rights to forest utilisation (Sajise 1998; Borlagdan, Guiang and Pulhin 2001). The attitudes of local people toward the forest gradually changed under the limited land ownership during colonial rule. Having lost their rights to the land, most Filipinos waned in their commitment towards forest protection and management (Sanvictores 1997; Lynch 1987).

After defeating the Spaniards, the American colonisers continued with the centralised management of forest resources and started the mechanisation of logging operations. The introduction of Philippine mahogany into the market resulted in a "steady loss of forest throughout the era of American rule" (Poffenberger 2000). The adoption of the 1935 Constitution likewise solidified state ownership of timberlands. It bestowed the powers to allocate, classify, regulate and manage forests to the government. This was followed by the

strengthening of the forestry bureaucracy, which was geared towards the extraction of natural resources (Borlagdan, Guiang and Pulhin 2001).

The devastation brought by the second world war compelled the government to open up the forests for large-scale timber extraction to finance reconstruction and to accelerate industrialisation (Garrity, Kummer and Guiang 1993). This policy was aided by the growing demand for tropical timber in Japan, the US and Europe. The rising status of the country as the primary exporter of wood in the international market was sustained in the succeeding decades. During the era of the logging boom, the government's command and control strategy led to the issuance of numerous timber license agreements (TLAs) in the 1960s and 1970s, the majority of which were captured by vested interest groups and individuals close to the president (Vitug 1993).

The Presidential Decree (PD) 705, otherwise known as the Revised Forestry Code, the backbone of forest management in the country, was issued in 1975 to effectively manage, rehabilitate and conserve forest resources but its implementation was hampered by limited human and financial resources, and corruption in the bureaucracy. Instead of complying with the government's requirement of replanting inadequately-stocked forest areas in their concessions, TLA holders colluded with government officials for favourable evaluation in exchange for largesse.

Open-access areas increased as a result of massive logging and failed reforestation efforts. As the construction of roads opened up many inaccessible areas, there was an influx of poor migrants from the lowlands who claimed and occupied forestlands (Poffenberger 2000). Since the government could not adequately respond to the twin problems of deforestation and the increasing number of people in the uplands, it decided to change its strategy from a purely regulatory approach to community forestry. Community forestry was initiated with the issuance of the Letter of Intent (LOI) 1260 in 1982, which established the integrated social forestry programme (ISFP). Under ISFP, security of tenure was given to legitimate claimants/occupants of upland farms. Tenure covered a period of twenty-five years, renewable for another twenty-five years, with the responsibility of the tenants to develop agroforestry farms and practice sustainable agriculture.

The growth of community forestry expanded after the EDSA Revolution[6] in 1986 (Borlagdan, Guiang and Pulhin 2001). A confluence of policy and institutional reforms soon ensued. In 1987, Executive Order 192 mandated the Department of Environment and Natural Resources (DENR) to conserve, manage, develop, properly use, license, and regulate the use of natural resources. Four years later, the Republic Act 7160, otherwise known as the Local Government Code of 1991, was legislated by Congress, partially devolving some of the functions of the DENR to the LGUs. The height of the community forestry programme was achieved with the issuance of Executive Order 263 in 1995, which established community-based forest management as the strategy to ensure the sustainable development of the country's forests and the passage of the Indigenous Peoples Rights Act (IPRA) in 1997.

Deforestation: trends, causes and consequences

The deforestation rate in the Philippines has broadly increased over time. According to the 1990 Master Plan for Forestry Development, the country lost a total of 10.9 million hectares of forest cover, or an average annual loss of 194,000 hectares, between 1934 and 1990 (see Table 1). The rate of forest cover loss increased dramatically from 1934 onwards until it peaked at an average of 300,000 hectares per year in the decade 1965-1975 as a result of the timber boom. This gradually declined to an average loss of 100,000 hectares per year from 1985-90.

Analyses have shown that the main causes of deforestation in the post-war period include intensive logging (both legal and illegal), upland migra-

[6] The EDSA Revolution was largely a non-violent mass demonstration. Also referred to as the People Power Revolution, the EDSA Revolution is associated with a rise in civil society activism in the Philippines. EDSA stands for *Epifanio de los Santos* Avenue, one of the major highways in Manila.

tion and agricultural expansion. From 1970 to 1980, annual allowable cuts and expansion of agricultural activities were found to be directly related to deforestation (Kummer 1990, cited in Garrity, Kummer and Guiang 1993). It was during this period that the Philippines made the top list of countries with the worst deforestation rates in the Asia-Pacific region (Vitug 2000).

Deforestation was also linked to structural forces such as control of wealth in the lowlands and uplands by the elites. Forest loss was further accelerated by large-scale exploitation of forest resources for private gain, inequitable access to land and assets for the majority, high population growth, and lack of urban job creation leading to poverty, migration and dependence on the forests and uplands (Porter and Ganapin 1988; Kummer 1992; Cruz 2000).

Deforestation had and continues to have severe impacts on the natural environment. Deforestation results in excessive soil erosion, especially during heavy rains, contributing to the siltation of rivers, lakes and man-made reservoirs. It threatens the continued existence of the country's estimated 12,000 species, nearly one-third of which are endemic to the Philippines. It is also blamed for the declining soil productivity, less water availability and flash-flooding. In 1991, massive floods inundated the city of Ormoc in Leyte in the Visayas claiming around 4,000 lives, with another 2,000 people unaccounted for (Vitug 1993). A similar incident happened again in November 2004 in the provinces of Aurora and Quezon in Luzon, where hundreds of residents died and thousands were rendered homeless due to the destructive floods brought about by two consecutive typhoons (Pulhin et al. 2005). While there is a continuing debate as to whether deforestation is really the main cause of these destructive floods, these events became the rallying point of the environmentalists in advocating for a total ban on logging, despite the fact that the country is suffering from an acute shortage of wood supply.

Efforts in forest development and management are affected by major changes in the political leadership in the country including that of the Department of the Environment and Natural Resources secretary. This means that programmes and projects may or may not be sustained by the next administration depending on its priorities. A mechanism to insulate successful initiatives in forest management from changes brought about by political pressures is lacking at present. This has been reflected in conflicting policy issuances by the DENR, particularly in the dispensation of resource use permits (RUP) in CBFM areas (Pulhin and Ramirez 2005). The issue of why responses to deforestation have been inadequate will be taken up in the subsequent sections.

Table 1: "Balance Sheet" of forest cover loss from 1934-1990 (000 hectares)

PERIOD	1934-1945	1945-1955	1955-1965	1965-1975	1975-1985	1985-1990	TOTAL 1934-1990	AVERAGE ANNUAL LOSS
Beginning Balance	17,000	15,700	13,900	11,600	8,600	6,600		
Less losses: – Forest conversion	1,260	1,740	2,200	2,835	1,880	460	10,375	185
– Logging damage	40	60	100	165	120	40	525*	9
Total	1,300	1,800	2,300	3,000	2,000	500	10,900	194
Balance	15,700	13,900	11,600	8,600	6,600	6,100		

*Source: Pulhin et al., 2005. * Damage out of 5.3 million hectares logged.*

Forest governance and devolution

After decades of tight state control, changes in forest governance in the Philippines have paralleled the devolution and decentralisation themes that have characterised forestry across the continents of Asia, Africa and the Americas (Mienzen-Dick and Knox 2001). These themes are normally associated with the concepts of participation, co-management, and empowerment that are seen to increase the proximity of decision-making to those that the decisions impact on, enhance a sense of local ownership, reduce transaction costs, and to lead to greater equity and sustainability (Anderson 2000, cited by Borlagdan, Guiang and Pulhin 2001).

Adopting the definition given by the Economic Development Institute/World Bank (1992), devolution is the transfer of government functions and responsibilities from higher to lower levels of governments, local communities and the private sector to improve the delivery of basic local services, while decentralisation deals with the "transfer not just of responsibilities but, most especially, of power and authority" (Fisher et al. 2000). In the Philippines, these themes are reflected in the adoption of community-based forest management as the main strategy to achieve sustainable forest management. However, the state has pursued devolution more so than decentralisation, and the power to regulate the forestry sector still rests with the central government, particularly the DENR.

Devolution as spelt out in national forest management policies

There are several national level policies that manifest the principles of good forest governance in the Philippines. Table 2 presents these policies, including their significant features with respect to the devolution process. These range from legislation by Congress, in the form of the Republic Acts, to policy issuances from the executive branch. Gauging from these enactments, one may argue that, in general, forest management has shifted towards more co-management and local control. However, not all the legislative changes have been fully realised in the actual implementation of policies at the local level.

Table 2: Policies relating to forest governance in the Philippines

YEAR	POLICY	SALIENT FEATURES
1991	Local Government Code (Republic Act No. 7160)	The implementation of social forestry and reforestation initiatives, the management of communal forests not exceeding 5,000 hectares, the protection of small watershed areas and the devolution of enforcement of forest laws to LGUs.
1992	National Integrated Protected Area System Act (Republic Act No. 7585)	The law represents a shift from state control of park administration towards a system of protected area management where indigenous communities and local associations are involved. A site-based Protected Area Management Board (PAMB), composed of representatives from the DENR, LGUs, NGOs and tribal groups, deliberate over land use plans, zoning measures, and resource activities in priority protected areas.
1992	Guidance for the Transfer and Implementation of DENR Functions Devolved to the Government Units (Department Administrative Order No. 92-30)	Provides guidelines for the transfer of certain DENR functions to LGUs as mandated under the Local Government Code. In forestry, the DENR devolved the following functions to LGUs: implementation of certain community-based forestry projects; management and control of communal forests with an area not exceeding 5,000 hectares; management, protection, rehabilitation and maintenance of small watersheds that are sources of local water supply, and; enforcement of forest laws in community-based forest management projects, small watershed areas and communal forests.

YEAR	POLICY	SALIENT FEATURES
1993	Delineation of Ancestral Lands and Domains Claims (DENR Administrative Order No. 2)	Provincial special task forces on ancestral domains (PSFTFAD) are mandated to meet with indigenous communities for the purpose of verifying ancestral domain claims and identifying forest boundaries. Once their claims are approved, indigenous communities are granted a certificate of ancestral domain claim (CADC).
1995	Adoption of Community-based Forest Management (CBFM) as the National Strategy for the Sustainable Development of Forestlands (Executive Order No. 263)	CBFM is the national strategy to achieve sustainable forestry and social justice with respect to forests. Organised communities may be granted access to forest resources under long-term tenure, provided they employ environmentally friendly, ecologically sustainable and labour intensive harvesting methods.
1996	Rules and Regulations for the Implementation of CBFM Strategy (DENR Administrative Order No. 96-29)	Local communities shall prepare their respective community resource management frameworks with the assistance of the DENR, LGUs and other government agencies. The CBFM programme shall apply to all areas classified as forestlands, including allowable zones within protected areas. CBFM integrates all people-oriented forestry programmes of the government.
1997	Indigenous People's Right Act (Republic Act No. 8371)	The state shall protect the rights of indigenous cultural communities to their ancestral domains to ensure their economic, social and cultural well-being. It shall also recognise the proper relations in determining the ownership and extent of ancestral domain. Indigenous peoples whose ancestral domains have been officially delineated and determined by the National Commission on Indigenous Peoples shall be issued a certificate of ancestral domain title (CADT) in the name of the community concerned containing a list of all those identified in the census.
1998	Manual of Procedures for DENR-DILG-LGU Partnership on Devolved and Other Forest Management Functions (Joint Memorandum Circular No. 98-01)	The Manual of Procedures reiterates the policies enunciated in Department Administrative Order 92-30 and mandates the DENR and the LGUs, together with other government agencies, to design forest land use plans as an integral part of comprehensive land use planning. It mandates the setting up of mechanisms for the DENR-DILG-LGU stakeholders partnership and oversight for the implementation and monitoring of the devolution and the partnerships through the creation of steering committees and/or technical working groups at the national, regional, provincial, city and municipal levels. It also provides for specific guidelines on how devolution can be implemented, and for the documentation of forest management projects and functions devolved from the DENR to the LGUs.
2003	Strengthening and Institutionalising the DENR-DILG-LGU Partnership on Devolved and Other Forest Management Functions (Joint DENR-DILG Memorandum Circular No. 2003-01)	This circular reiterates previous issuances and calls for the acceleration of collaboration, partnership, coordination and institutionalisation of the working relationships between the DENR, the DILG and LGUs in forest management. It also allows the DENR and LGUs to co-manage forests and reiterates the participation of LGUs in the issuance of tenure instruments and permits.
2004	Promoting Sustainable Forest Management in the Philippines (EO 318)	This reaffirms that CBFM is the primary strategy in all forest conservation and development and related activities, including joint ventures, production sharing and co-production, to be encouraged in all private sector forestry enterprises and ventures.
2004	Revised Rules and Regulations for the Implementation of EO 263, otherwise known as the Community-based Forest Management Strategy (DAO 2004-29)	The revised rules and regulations extend the effective period of the work plans from one to five years to reduce transaction costs on the part of the people's organisation. It also sets the community resource management framework (CRMF) as the initial environment examination (IEE).

Sources: DENR 1998; DENR 2003; DENR 2004; Magno 2003.

Four prevailing types of state-initiated devolution in the Philippine forestry sector can be identified. In the first type, devolution is reflected in the various forms of people-oriented forest management programmes and projects under CBFM.[7] This involves the transfer of certain responsibilities and rights from the DENR to the organised communities, such as forest rehabilitation, protection and conservation. A second type of devolution is defined by the Local Government Code, which devolves certain environmental functions from the central government to the local governments. This is mainly illustrated by the transfer of management rights over the integrated social forestry programme areas (Pulhin 2004a). The third type is made possible through the enactment of Republic Act No. 7586, otherwise known as the NIPAS (National Integrated Protected Area System) Act of 1992. NIPAS provides for the creation of a site-based protected area management board (PAMB), composed of representatives from the DENR, the local government units, NGOs and organised communities, to deliberate over land use plans, zoning measures and resource activities in priority protected areas (Pulhin 2004a). The fourth type of devolution is embodied in the Indigenous People's Right Act (1997) that provides for the recognition, protection and promotion of the rights of indigenous cultural communities/indigenous peoples (ICCs/IPs) to their ancestral lands through the issuance of certificates of ancestral land title (CADT). Indigenous people are in turn entrusted with the responsibility to maintain, develop, protect and conserve these areas with support and assistance from government agencies (Pulhin 2004a).

Outside of the state-initiated types of devolution is "self-initiated" or "organic" devolution (Contreras 2003). This type of devolution is initiated by the community itself, or by a third party such as an NGO or a "change agent" (Pulhin 2004a).

The challenge of going beyond devolution to decentralisation

Limited progress in devolving forest governance has been made, but full decentralisation — the transfer of authority and power — will require much greater efforts.

Policies relating to forest management emanate from the central office of the DENR and are signed by the secretary. These are disseminated to the local DENR offices, regional environment and natural resources offices (RENRO), provincial environment and natural resources offices (PENRO), community environment and natural resources offices (CENRO) and to people's organisations.[8] Although the regional/provincial offices have the power to issue memoranda relating to their areas of jurisdiction, the policies and decisions relating to forest use, supervision and the control of forest activities are still confined within the powers of the central office.

Under the Local Government Code of 1991, the LGUs have the authority to establish their own Environment and Natural Resources Offices (ENROs) to oversee forest areas and functions that have been devolved. However, because of inadequate funds the LGUs were not receptive to the idea. Later, the concept of ENROs gained momentum when best practices were recorded with the successful implementation of environmental projects in the provinces of Nueva Viscaya and Bukidnon. In areas where natural resources are being extracted, some LGUs have complained that their share of the national budget is not remitted

[7] "People-oriented forestry" is used in this paper to refer to programmes, projects and initiatives that involve the participation of upland households and communities in different forestry activities, such as reforestation, forest protection, agroforestry and other forestry-related livelihood activities. These programmes and projects include, among other things, those established by the government in the 1970s, such as the Family Approach to Reforestation Programme, the Communal Farming Programme, the Forest Occupancy Management Programme and the subsequent forestry programmes and projects which were unified under CBFM. They also include related projects initiated by non-governmental organisations, people's organisations, international agencies and the private sector.

[8] DENR Administrative Order No. 2004-29 defines a people's organisation as "a group of people, which may be an association, cooperative, federation, or other legal entity, established by the community to undertake collective action to address community concerns and needs and mutually share the benefits from the endeavour." In the context of CBFM, a people's organisation is a legitimate institution that represents the community in the management, development, protection and utilisation of the local forest. The people's organisation is the recipient of the communal land tenure instrument - the Community-Based Forest Management Agreement (CBFMA).

by the central government through the internal revenue allotment (IRA). This, in turn, limits their capacity to fund forest rehabilitation and reforestation efforts.

There are four specific forest management functions that were devolved to the LGUs in 1992: (1) the implementation of community-based forest projects (specifically the integrated social forestry programme, new reforestation projects and family-based and community-based contract reforestation projects); (2) the management and control of communal forests with an area of 5,000 hectares or less to be converted to community forestry projects; (3) the management, protection, rehabilitation and maintenance of small watershed areas serving as a source of local water; (4) the enforcement of forest laws in community-based forest project areas, including laws on the prevention of forest fires, apprehension of violators, confiscation of illegally extracted forest products as well as their conveyances, and imposition of penalties for violation. Despite this devolution in forest management, these LGU functions are subject to the "supervision, control and review of the DENR" (Borlagdan, Guiang and Pulhin 2001).

In Nueva Viscaya, particularly in the case of the Barobbob Watershed, "supervision" by the DENR has become an obstacle in providing livelihood opportunities through resource utilisation (Ramirez 2004). Local people could not cut the trees they had planted because the DENR would not issue cutting permits. This contradicted the stipulation in their memorandum of agreement (MOA) with the provincial government, which declared the right of the local people to harvest any trees they plant. The DENR asserts that the planted trees are located within a critical watershed; hence, it has prohibited the cutting of trees (Ramirez 2004). Such bottlenecks that remain in the national system of forest management can best be resolved through dialogue and the proper interpretation of policies.

While the DENR has devolved some of its functions to the LGUs, some LGUs claim that the *de facto* control of forest resources remains with the DENR. Equally, the local communities could complain that the LGUs have not adequately transferred responsibilities and authority down to them.

Community-based forest management (CBFM) as the main strategy of forest management

Despite the initial contribution of the state-cum-corporate forestry approach to the national economy, it failed to address the problems of forest destruction and inequitable access to forest resources. Realising that people in the uplands can be made partners in forest management, the government has shifted its strategy to people-oriented forestry in the form of community-based forest management. CBFM departs from the traditional notion that upland communities are the main authors of forest destruction and instead advances a decentralised, participatory approach to forest governance (Pulhin 2003).

CBFM evolved from the earlier people-oriented programmes of the 1970s, such as the forest occupancy management (FOM), the family approach to reforestation (FAR), and communal tree farming (CTF), which were combined under the integrated social forestry programme (ISFP) through the Letter of Instruction 1260 issued by President Marcos in 1982. Similar programmes have subsequently been initiated by the government to promote the participation of local communities in the development and protection of the forest resources. Topping these initiatives is the issuance of Executive Order 263 dated 19 July 1995, and its implementing rules and regulation in the form of Department Administrative Order 96-29, which adopts CBFM as the main strategy for achieving the sustainable development of forest resources and social justice.

CBFM aims to promote community empowerment, sustainable forest management, a healthy and balanced ecology, and the recognition of the rights of indigenous people to their ancestral domains. CBFM is expected to solve the interrelated problems of forest degradation and upland poverty. In exchange for protecting and managing the forests, upland communities are given the rights to utilise forest resources for their livelihoods. User rights are embodied in the community-based forest management agreement (CBFMA) that serves as the community's guarantee to access and manage the forest for twenty-five years, renewable for another twenty-five years. For communities living inside the protected areas, a similar tenurial instrument in the form of the protected areas community-based resource management agreement (PACBRMA) is issued by the DENR. Unlike the CBFMA, the PACBRMA strictly prohibits the cutting of trees inside the protected area to preserve biodiversity. In most cases individual occupants have also been awarded with a certificate of stewardship.

The community-based forest management strategy can also be employed by the local government units in managing their natural resources as provided by the Local Government Code of 1991. Section 7.4 of the code authorised the LGUs to enter into a memorandum of agreement with the DENR for the transfer of watershed management, and into joint ventures or cooperative arrangements with people's organisations and NGOs in the delivery of certain basic services (Chapter 4, Section 35). With this, the code allows for a more effective management of natural resources because local governments are more knowledgeable of the different issues in their jurisdiction and they can readily respond to problems and conflicts given their proximity to the community (Ramirez 2004).

Consistent with the 1987 Constitution, the DENR cancelled erring timber license agreements and no longer renewed those that had expired to pave the way for the eventual takeover of the TLA areas by the local communities. Thus, from 422 timber licenses covering 10.3 million hectares in 1973, the number of TLAs dropped to sixteen in 2003, accounting for 662,000 hectares, with no possibility of extension (FMB 2003a; Figure 1). Most of the areas formerly covered by the TLAs are now placed under CBFM and are being managed by people's organisations or cooperatives. There are about 5.97 million hectares of forestlands covering 5,503 individual sites that are under the CBFM strategy (Pulhin 2005).

Although people-oriented forestry has been in effect for almost four decades, there is as yet no single legislated policy that provides a stable legal framework to ensure that the programme is implemented effectively. The unstable policy environ-

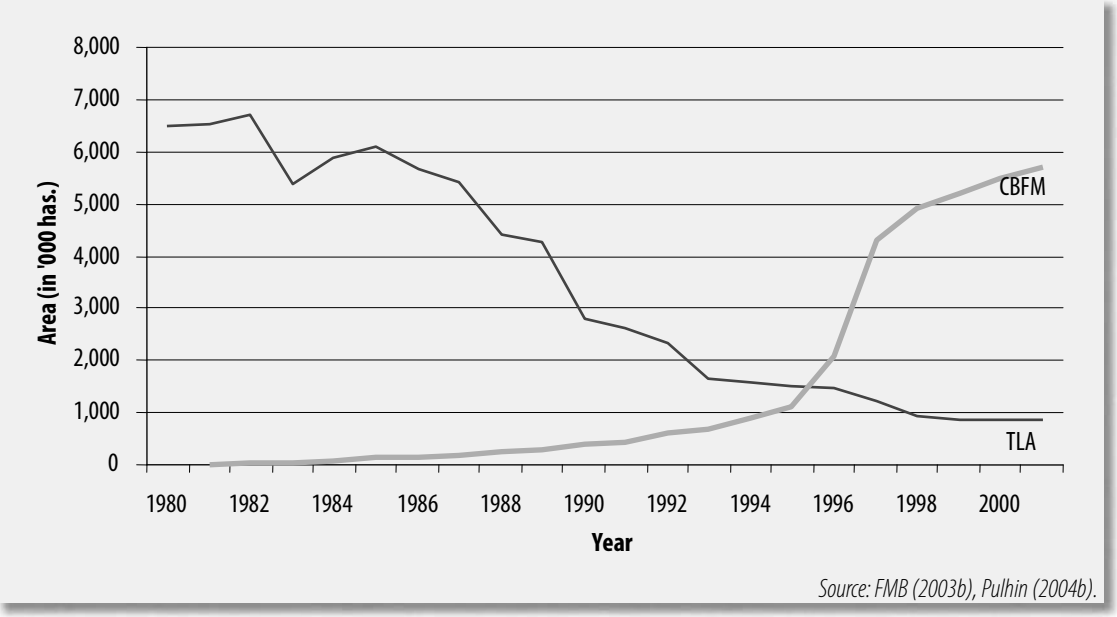


Figure 1: Change in the allocation of Philippine forestlands (1980-2003).

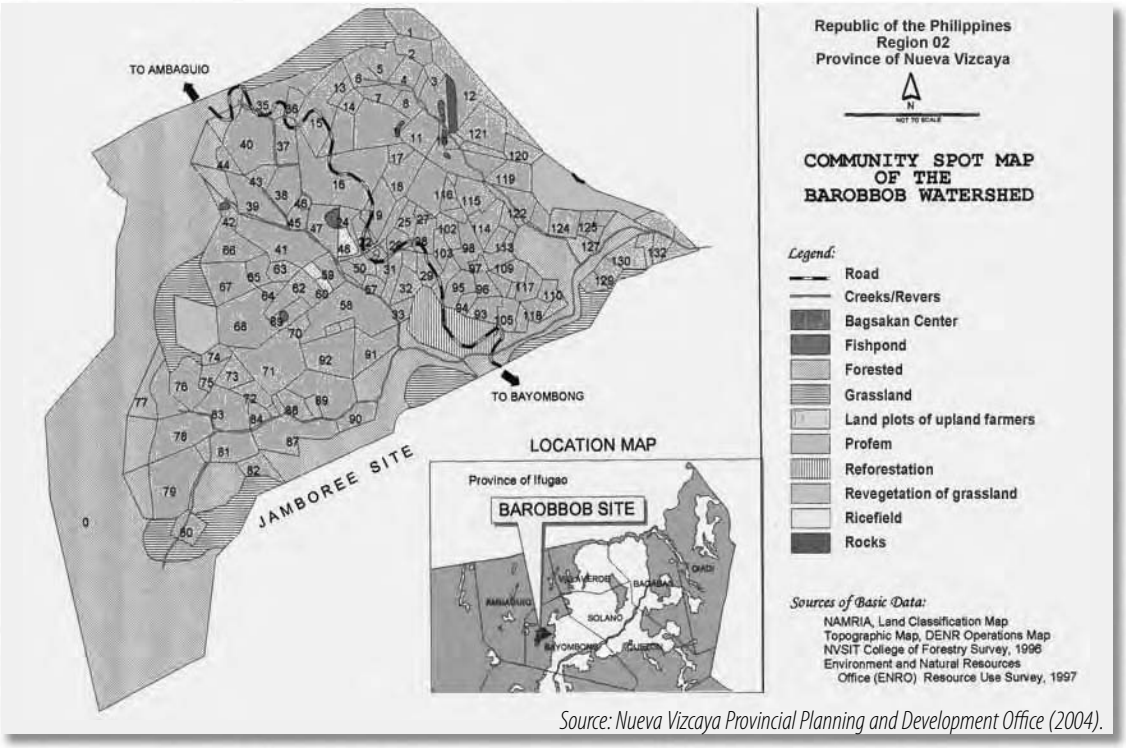
ment continues to derail CBFM implementation, particularly through the suspension and cancellation of resource use permits (RUPs) which demoralises participating people's organisations. Most of the stakeholders in CBFM are advocating for the legislation of the proposed Sustainable Forest Management Act, which incorporates CBFM as the core management approach in order to create a more stable policy environment (Pulhin, Amaro and Bacalla 2005).

To illustrate how forest governance is evolving at the local level, this paper will draw heavily on experiences of the Barobbob Watershed which is located in the northern part of the Philippines. Although categorised as a locally-initiated type of CBFM, the management of this small watershed clearly shows the dynamics and externalities of how different actors in forest management interact and influence the future course of forest resources.

Situated in the town of Bayombong in the province of Nueva Vizcaya, the Barobbob watershed is composed of 439 hectares of undulating hills and numerous agricultural valleys (Figure 2). It is considered to be one of the important watersheds in the province as its springs have provided potable and irrigation water to the towns of Solano and Bayombong since the 1960s.

Like most watersheds in the country, Barobbob was not spared by the logging boom. The present land use is dictated by the physical changes that have transpired over the past decades owing to several factors, including a migration wave and the subsequent small-scale extraction of timber resources (Ramirez 2004; Table 3). Although the area was not covered by a TLA, concessionaires in the adjacent town encroached on the watershed and decimated the forest. After World War II, there were only six indigenous families who occupied the upstream portion of the watershed. The population grew over the years due to the opening of the road and migration. Upland families practiced slash and burn farming and logging using carabao (water buffalo).

The condition of the forest worsened in the 1980s because of the steady decline in the water supply. Irrigated farms suffered and the supply of potable water dropped. The government through the then Bureau of Forest Development, the precursor of the DENR, responded by evicting the "squatters"



Source: Nueva Vizcaya Provincial Planning and Development Office (2004).

Figure 2: Community spot map of the Barobbob watershed

Table 3: Land use changes in the Barobbob watershed (1930-2002)

LAND USE	STATUS		
	1930-1956	1957-1991	1992-PRESENT
Forestland	Primary growth forest	Decreasing area	Residual forest
Grassland/open land	—	Increasing area	Assigned for reforestation
Farm/garden	14 open farms in Sitio Pawac	Increasing area	Contained
Built-up area	—	Increasing area	Contained

Source: Ramirez 2004.

but this did not resolve the problem. To the contrary, claimants burned forest plantations established by the government and forest degradation continued.

The passage of the Local Government Code in 1991 provided a much needed breakthrough for forest governance. Through the leadership of the governor, the provincial government of Nueva Vizcaya was among the first to apply the provision of the code in the management of natural resources. In 1993, the DENR and the provincial government signed a memorandum of agreement transferring the right to manage the Barobbob watershed to the latter. This was the beginning of an effective partnership between the provincial government and the upland occupants.

Key players in Community-based forest management

At least three key players are formally involved in the implementation of CBFM: (1) the local communities or people's organisations, (2) the Department of the Environment and Natural Resources, and (3) the local government units. Two additional actors were present at the onset of the programme, namely the non-governmental organisations that assisted in the formation of people's organisations, and the funding institutions that financially supported these initiatives. Although they are still present in some CBFM areas, the presence of the funding institution has already waned due to shifts in priorities. Another group of actors, the academe/research institutions, while not directly involved in the implementation of CBFM, have continued to support the programme in the form of science-based forest policy formulation, provision of technical assistance and project monitoring (Pulhin 2004a).

In most CBFM sites, the burden of forest governance, or more specifically, the implementation of forest policies, has been largely shouldered by the people's organisations (POs). Working on a limited or nil budget, the POs are currently handling the responsibility of protecting the remaining forest resources from timber poachers and illegal loggers and rehabilitating degraded or open access areas in exchange for the right to occupy, possess, utilise and develop the forestlands and resources in a designated area and the right to claim the ownership of introduced improvements. Forest activities are governed by the community resource management framework (CRMF) that basically sets the goals of the POs and the five-year work plan (FYWP), which specifies rehabilitation, utilisation and livelihood targets. The POs are also responsible for developing and implementing equitable benefit-sharing arrangements among their members, observing transparency in their dealings and promoting participation in decision-making.

The Department of the Environment and Natural Resources, on the other hand, is the primary government agency responsible for the management, development and administration of the country's forestlands and resources. Its main concerns at the field level are to monitor and evaluate the performance of the CBFM POs, to facilitate requirements, such as clearances and permits, needed by the POs in their daily operations and to provide technical assistance. At the operational level, the DENR is the sole government agency with the legal mandate to issue land tenure instruments for

all classified lands. Moreover, policies relating to forest management emanate from the DENR. Under DENR 2004-29, the Forest Management Bureau (FMB) is tasked to serve as the National Coordinating Office of CBFM to draft CBFM policies, guidelines and procedures; prepare and monitor implementation of the national CBFM programme, and; liaise with the government and NGOs for support and participation in the programme (Pulhin, Amaro, Bacalla 2005).

The Local Government Code has provided the mechanism for the participation of the local government units in forest management. The code devolved certain functions of the DENR to the LGUs, including the community-based forest management projects, particularly those previously under the integrated social forestry programme. For their part, the LGUs have included forest management and protection in the formulation of their local ordinances and policies. Although full decentralisation is yet to be realised, the LGUs have become more pro-active in the management of natural resources.

The provincial government of Nueva Vizcaya successfully implemented the Local Government Code by creating space for the co-management of resources, specifically in the case of the Barobbob watershed. As soon as the responsibility to manage the resources within the watershed was devolved by the DENR to the provincial government, it began the long and arduous process of reconciliation with the watershed occupants. The provincial government started the process by holding dialogues with the land claimants and testing different strategies. One strategy was to resettle the occupants to another area outside the watershed, but the occupants directly rejected the proposal. They argued that this would impede their access to their farms and limit their livelihood opportunities.

The provincial government began to realise that the best way to manage the watershed was to establish a good partnership with the watershed community. The provincial government enjoined and organised people with common goals and objectives instead of evicting them from their farms. The Barobbob Watershed Occupants Association, Incorporated (BWOA) was formed in November 1997, primarily to arrest forest degradation and help the government and other agencies carry out development and ecological programmes in the watershed. It is composed of 135 member-households whose main livelihoods are vegetable farming. Memoranda of agreement stipulating the rights and responsibilities of both parties were issued by the provincial government to individual occupants as a form of tenure. While the memoranda of agreement grant use and control rights to the occupants, the provincial government retains the oversight function.

Funds are being provided by the provincial government to the BWOA for forest protection, forest rehabilitation and livelihood generation. These funds are provided by the provincial development fund. The provincial government likewise links the POs to other government agencies, NGOs and academic institutions that could help them in managing the forest properly. The personal approach of the governor in addressing the concerns of the watershed occupants brought a stronger bond to the partnership. For instance, in 2000 the BWOA encountered a problem in cutting their planted trees because the DENR refused to give them cutting permits. They filed a petition to the governor asking the provincial government for specific policy guidelines. After just one month, the Office of the Governor issued Executive Order 141, prescribing the implementation of guidelines governing planted gmelina, mahogany, ipil-ipil (*Leucaena leucocephala*) and other species within the Barobbob watershed.[9]

As a result of the partnership between the provincial government and the BWOA, two major accomplishments were achieved. The people's organisation has been effective in carrying out its annual reforestation activities as indicated by the increasing forest cover of the watershed in the last five years: the re-greening project of the people's organisation, which involves the planting of gmelina, mahogany and dipterocarp, has covered

[9] The DENR still has the supervision and control functions, so the issuance of cutting permits has to be approved by them subject to its existing rules and regulations.

27 hectares or an average of 5.4 hectares per year. The occurrence of forest fires within and around the adjacent areas has been significantly reduced due to the vigilance of the members of the people's organisations (Ramirez 2004).

Agenda setting

The introduction of people-oriented forestry in the Philippines in the 1970s was largely spurred by external forces, such as the assistance provided by the funding agencies and the paradigm shift in development policies brought about by increasing environmental awareness. In the Philippines, much of the support for the forestry sector came from the Ford Foundation, the United States Agency for International Development (USAID), the Asian Development Bank (ADB) and the World Bank.

The fifteen-year old upland development programme (UDP), funded by the Ford Foundation, contributed significantly to shaping and refining the earlier policy on social forestry, the forerunner of the CBFM programme (Pulhin 2004a). Support coming from these institutions was translated into nationally-initiated projects, such as the community forestry programme (CFP). Other projects were locally and self-initiated. The Barobbob watershed exemplifies a locally- initiated project wherein the provincial government formally requested the DENR to transfer responsibility for management of the watershed. An outstanding example of a self-initiated project is the *Muyong* system developed by the Ifugaos in the Northern Philippines (Borlagdan Guiang and Pulhin, 2001; Ramirez 2004). *Muyong* are patches of man-made forest close to Ifugao settlements that provide timber, fuelwood, rattan, bamboo, palms and fruit trees, and contribute to stable watersheds.

Identifying and deciding the issues

Using a participatory framework, issues in forest management are jointly identified by various stakeholders in the locality. Starting with the formulation of the community resource management framework and the five-year work plan by the people's organisation, all targets and plans are assessed by the DENR, the LGU and other stakeholders, such as farmer's associations and NGOs, if they are present in the area. The community resource management framework and the five-year work plan are approved and affirmed by the Community Environment and Natural Resources Office for implementation. Under the five-year work plan, the people's organisation will state its proposed activities and targets for forest rehabilitation and development (i.e., agroforestry, tree plantation, assisted natural regeneration, timber stand improvement and forest protection), for forest utilisation (i.e., annual allowable cut and type of finished product), and for livelihood generation.

While they follow the same principle in participatory planning as mentioned above, annual plans in co-managed areas do not necessarily require the approval of the DENR. In the case of the Barobbob watershed, the BWOA has a management plan where different activities are listed and zones are delineated. Areas near springs are included in the protection zone, while farms are allotted as production areas provided that a 40% tree cover is maintained by the individual occupants. The plan of activities for the year are submitted to the Environment and Natural Resources Office (ENRO) of the provincial government for approval. A proposal will then be written by the BWOA with the help of the ENRO and submitted to the Provincial Environment and Natural Resources Council (PENRC) for funding. Most of the approved activities of the BWOA for the last five years focused on forest rehabilitation, such as plantation establishment and maintenance.

The decision-making function in CBFM depends on the organisational structure of the people's organisation. In most cases, decisions rest with the board of directors/trustees or the policy-making body. The general assembly is expected to be consulted by the board of directors/trustees, especially on sensitive issues, and any decisions should be properly disseminated to the general assembly. The unique physical characteristics of some CBFM areas (e.g., the vast size of the area and rugged

terrain), however, pose a challenge to representation. Decisions can not always be made with full member consultation. To address this concern, some POs have formed sub-units in different *barangays* within the CBFM area to serve as planning and decision-making units. These units will, in turn, form the core group for planning the activities of the organisation.

For Barobbob, the manageable size of the watershed and the small number of BWOA members make planning and decision-making relatively easy. The executive committee, composed of the president, vice-president for administration, vice-president for operation, secretary, treasurer and *sitio* (hamlet) representatives, meets four times a year to discuss pressing issues, plan and monitor activities and craft policies. Sensitive issues are submitted to the general assembly for discussion and decision-making. The general assembly usually meets once a year.

Implementation, monitoring and evaluation

Department Administrative Order 2004-29 stipulates the creation of a composite team to conduct an annual participatory monitoring and evaluation of CBFM sites to assess the various issues, problems and constraints related to the development and strengthening of the implementation of the CBFM programme. The composite team is composed of selected personnel from the Regional Environment and Natural Resources Office, the Provincial Environment and Natural Resources Office, the Community Environment and Natural Resources Office, the LGU, NGOs and other concerned sectors in and around the CBFM area. Periodically, personnel from the Community Environment and Natural Resources Office conduct their own monitoring and evaluation of the CBFM area to check whether the people's organisation is properly pursuing its targets. Some POs have their own internal monitoring to keep track of the progress of their activities. In reality, monitoring by the DENR is difficult to conduct because of the limited budget set for this purpose (Pulhin, Amaro, Bacalla 2005).

A similar process is being followed in co-managed areas, such as the Barobbob watershed. Most of the oversight function, however, is being shouldered by the provincial government. The monitoring team is usually composed of personnel coming from the different departments of the provincial government, representatives from the DENR and other stakeholder groups.

Cost-benefit sharing

After the conclusion of projects funded by the donor agencies, the majority of the CBFM POs are now solely responsible for protecting and rehabilitating the forests. Despite working on a limited budget and with limited technical capacity, the POs have significantly contributed to the total reforestation achieved by the government, which was recorded at 549,807 hectares from 1987 to 1998 (FMB 1998). Moreover, CBFM participants have established tree plantations in areas outside the forests, even in "alienable and disposable lands," amounting to 8,223 hectares as of 1999 (Tesoro 1999).

In terms of forest protection, the government is able to save at least P127 million annually by allowing the communities to protect CBFM sites instead of hiring additional forest guards (Tesoro 1999). Most of the forest guards deployed by the POs are poorly armed and are not compensated. Looking at these accomplishments, the people's organisations have significantly contributed to forest cover in the Philippines, which increased from 5.6 million hectares in 1999 to 7.2 million hectares in 2003 (FMB 2005).

Behind this positive backdrop lie insecure resource use rights. Timber extraction in CBFM areas is now restricted in Regions 11 and 13 in the southern Philippines, with mandatory approval of the DENR secretary required. This restriction was in response to the growing criticism by environmentalists for a total log ban in the wake of the Aurora landslide, but has been at the expense of the livelihoods of upland communities. Hence, for most of the POs that are self-financing, forest management activities are now in abeyance. Moreover, the POs that were issued with resource use permits (RUPs) have experienced

three national RUP suspensions over the past five years under three secretaries without adequate consultation. These suspensions have tended to penalise even those people's organisations that are performing well (Pulhin and Ramirez 2005).

The government has gained from CBMF on two fronts. It has been able to achieve forest development and protection with only minimal costs and it has earned a net income in the form of forest charges, but to the detriment of the POs. The issue of livelihood generation is directly linked to the participation of the private sector in CBFM which, until now, has been lacking.

Policy recommendations

Beginning in the late 1970s, the Philippines has made a monumental leap in embracing people-oriented forestry by testing strategies that address the twin problems of upland poverty and forest degradation. From state control, the management of natural resources is increasingly being transferred to local governments and upland communities as embodied by the devolution process and CBFM.

Of all approaches trialled thus far, it is evident that CBFM has enjoyed the greatest success in managing the forests of the Philippines. CBFM has contributed to the increasing tree cover of the country. People's organisations have been effective in forest governance, particularly in forest protection and rehabilitation. But there is still a lot to be done. At the community level, it is difficult for people to find a sustainable source of livelihood that is not dependent on forest resources. Marketing is also a major problem because of the lack of capital and market linkages. CBFM is likewise under constant attack from different sectors because of the limited use right it grants to the people's organisations, particularly in relation to tree cutting. At the policy level, CBFM will not be a definitive approach to forest management until Congress passes legislation specific to CBFM. CBFM can still be challenged and altered. Its future at the centre of Philippine forestry has yet to be assured.

The success or failure of CBFM lies in the stability of the policy environment. To transform the programme into a more robust and sustainable strategy, the people's organisations should have greater control over decision-making relevant to their operations. This requires the following steps:

1. Strengthening the political capacity of the CBFM people's organisations by activating the National CBFM Federation and by democratising the forest policy-making process to ensure that their voices are heard when issues affecting them are deliberated.

2. Enacting a law such as the proposed Sustainable Forest Management Act to ensure the stable implementation of CBFM philosophy and objectives. This has to be matched with an appropriate support system on the ground to achieve meaningful outcomes.

3. Simplifying policies and procedures to minimise transaction costs on the part of the people's organisations, especially in the issuance of resource use permits.

4. Securing the active collaboration of major actors, specifically the local government units, the private sector, and civil society in forest protection, rehabilitation and livelihood generation.

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6

FOREST GOVERNANCE IN THAILAND

Jaruwan Kaewmahanin[1] *and R.J. Fisher*[2]

1 Freelance researcher (ojwkm@yahoo.com).
2 Australian Mekong Resource Centre, University of Sydney (rjfi sher@ozemail.com.au).

Introduction

For several decades discussions of forest policy have frequently revolved around the themes of decentralisation, popular participation and pluralist stakeholder involvement. These discussions have included the need to change the state institutions responsible for forest management to enable them to deal more effectively with the rather different professional roles associated with decentralised or community-based approaches to forest management. These concerns are not new, but they are increasingly being subsumed under the term "forest governance." This is part of the strong contemporary emphasis on "good governance" in the development field, at least by multilateral and bilateral donors.

This chapter examines the situation of forest governance in Thailand, paying particular attention to the involvement of forest dwelling and forest dependent peoples. We begin with a brief discussion of the idea of governance. Although the pursuit of good governance has become a dominant development and resource management discourse, the term is used in a variety of ways, often very loosely. The Asian Development Bank (ADB) explains its use of the term as follows:

> *The term "governance" means different things to different people. It is useful, therefore, for the Bank to clarify, at the very outset, the sense in which it understands the word. Among the many definitions of "governance" that exist, the one that appears the most appropriate from the viewpoint of the Bank is "the manner in which power is exercised in the management of a country's economic and social resources for development." On this meaning, the concept of governance is concerned directly with the management of the development process, involving both the public and the private sectors. It encompasses the functioning and capability of the public sector, as well as the rules and institutions that create the framework for the conduct of both public and private business, including accountability for economic and financial performance, and regulatory frameworks relating to companies, corporations, and partnerships. In broad terms, then, governance is about the institutional environment in which citizens interact among themselves and with government agencies/officials (ADB 1995).*

In this context, the ADB identifies "four basic elements of good governance: (i) accountability, (ii) participation, (iii) predictability, and (iv) transparency" (ADB 1995).

The World Bank has a broadly similar approach. It places emphasis on aspects of governance that affect economic performance and is concerned with ranking governments in terms of performance against a number of clusters of indicators (Kaufman, Kraay and Zoido-Loboton 1999). The six clusters of

indicators are: voice and accountability; political instability and violence; government effectiveness (capacity of civil service, etc.); regulatory burden (policies themselves); rule of law; and graft.

Governance can be thought of in terms of the processes by which policy and management decisions are made, including the actors involved and the way they are involved:

> *Governance can be defined as the process and arrangements by which decisions are made and implemented. Forest governance is the process and arrangements by which forest-related decisions are made and implemented. Governance refers not [only] to formal arrangements about how decisions are supposed to be made, but to what really happens. Power fits in here, because power can be thought of as the ability to make (or influence) decision-making and the implementation or enforcement of decisions (Fisher 2003).*

This view allows us to look not just at what governments do, or purport to do, but also at what happens in practice. This is important to forest governance in Thailand because community management and the involvement of civil society operate towards decentralisation of forest management, in contrast to the tendency of the official forest agencies towards a very autocratic and centralised approach to forest governance.

Decentralisation is an important dimension of forest governance. It is necessary to differentiate between decentralised performance of functions and roles and devolution of decision-making power (Fisher 2000). It is also important to distinguish between decentralisation to formal local government and decentralisation to "communities."

Ribot argues that decentralisation for effective natural resource management should be democratic: "Decentralisation requires both power transfers and accountable representation" (Ribot 2002, 6). Accountable representation means that local leaders need to be accountable downward (i.e., to the people they represent). This runs against the tendency of resource management agencies that require communities to be accountable upwards (i.e., to the agencies).

Our underlying concern in this chapter is with the extent to which decision-making power (which includes the power to decide or influence decisions on management objectives) is devolved away from forest management authorities and focussed towards local government and communities. We also examine the extent to which forest governance involves multiple stakeholders.

We would like to stress that decision-making power is about decisions that can be implemented in practice. We also wish to stress that power can be shared:

> *Power can be thought of as the capacity to have a meaningful (effective) input into making and implementing decisions about how forests are used and managed. Having a meaningful role does not mean that an actor makes all decisions, but that his/her interests are given serious attention in negotiations. Meaningful decision-making also involves implementation. If a decision cannot be implemented or enforced, then the role in decision-making does not involve effective power (Fisher 2003).*

Country background

Thailand is located in mainland South-east Asia. It covers a total area of 51.4 million hectares. There are four natural regions with varying topographical features. These are the mountainous north, the fertile central plains, the north-eastern plateaus and the southern peninsular. The climate is monsoonal and Thailand is a humid tropical country with an average temperature of 29 degrees Celsius. The highest monthly average is 35 degrees in April, and the lowest is 17 degrees in December. The three

main seasons are: the cool season, the hot season and the rainy season (November-February, March-May and June-October, respectively).

Thailand is the only country in South-east Asia that was not colonised by a European power. It has been governed by a constitutional monarchy since 1932. The lower house is elected, but the prime minister is appointed by the king; usually the leader of the party who can form a majority coalition government. After a tumultuous period of governance in the 1990s, Thailand has enjoyed relative political stability in recent years. In 2001, the Thai Rak Thai party of Thaksin Sinawatrra won an overwhelming election victory and has cemented its hold on power through populist policies. Thailand is divided into seventy-six provinces, each administered by a governor appointed by the Ministry of Interior. These seventy-six provinces are in turn divided into 795 districts, 7,255 *tambons* (sub-districts) and 72,577 villages.

Thailand has a population of 62.8 million (2004), of which approximately 6 million live in the capital city, Bangkok. The major ethnic group is the Thai, who originated in China. Thai is the official language. Buddhism is the official religion practiced by 90 per cent of the population. Other religions include Islam, Christianity, Hinduism and animism.

Other ethnic groups reside largely in upland areas. They speak a variety of distinct languages and have quite distinct cultures. Major groups are the Karen, Mien, Lahu, Lisu, Hmong and Akha. Many of these groups migrated into Thailand within the last hundred years. According to Anon (2004), in 1998 there were 460,000 people living in hill areas, mostly from the hill tribes and mainly in the north and west.

The per capita GNP of Thailand in 2002 at current prices was approximately THB (Thai baht) 84,540[3] (Bank of Thailand and Office of the National Economic and Social Development Board 2003). The average national per capita income in 2001 was THB 81,435, but there was considerable regional variation (Table 1).

Thailand is a middle-income country that has seen remarkable progress in human development in the last twenty years. It experienced one of the world's highest economic growth rates from 1985–1995 of almost nine per cent per annum. The country has recovered from the Asian financial crisis of 1997-98, enjoying a GDP growth rate of 6.1 per cent in 2004 (World CIA Factbook 2005), spurred by strong demand from China and domestic stimulation policies under Prime Minister Thaksin Shinawatra (referred to as Thaksinomics). The government's expansionist policies include support of village development and are very popular.

Table 1: Per capita income by region (THB)

REGION	PER CAPITA INCOME 2000	PER CAPITA INCOME 2001
Bangkok	234,398	239,207
Bangkok Metropolitan Administration	208,631	231,565
Central	75,075	78,588
North-east	26,755	27,381
North	39,402	40,352
West	59,021	63,937
East	166,916	175,292
South	53,966	54,176
Average	78,783	81,435

Source: National Accounts Office, Office of the National Economic and Social Development Board

[3] USD 1 = THB 37.7 (http://www.xe.com/, 08/08/2006).

Thailand's Human Development Index was 0.778 in 2003, placing it 73 out of 177 countries (UNDP 2005). Life expectancy is seventy years and literacy is high at 92.6 per cent (ibid.). Most children are in school; universal primary school enrolment is likely to be achieved within a few years. Thailand has reduced poverty from 27 per cent in 1990 to 9.8 per cent in 2002, and the proportion of underweight children has fallen by nearly half (Office of the National Economic and Social Development Board, United Nations Country Team, Thailand 2004, 69). The Human Development Index has increased by 21 per cent since 1975 (UNDP 2005).

Despite these gains, poverty remains widespread: 32.5 per cent of the population survived on less than USD 2 per day from 1990-2003, 19 per cent of the population under the age of five were underweight from 1995-2003, and 15 per cent did not have access to a sustained, improved water source in 2002 (UNDP 2005). Inequality remains a significant challenge with the poorest 10 per cent only enjoying 2.5 per cent of national consumption in 2002, with the richest 10 per cent being responsible for 33.8 per cent of consumption (ibid.). On 26 December 2004, a tsunami hit the south-west coast of Thailand leaving over 5,000 dead and 3,000 missing.

History of forest conservation and management

Causes of forest loss and degradation

Thailand's forest can be classified into five types (ONEP 1997): evergreen, mixed deciduous, dry dipterocarp, pine and mangrove. Evergreen forest is the dominant type of tropical rain forest, covering 43 per cent of the total forest area. In 1961, forest covered 53.3 per cent of the country, but has decreased in size at an average of 2.73 million rai (0.44 million hectares)[4] per year during the period 1961-1993. Reasons for the degradation of forests and encroachment include: logging concessions, illegal logging, increasing demand for arable land, fire, and infrastructure projects such as dams, reservoirs and roads. By 1998, forest cover had been reduced to only 25.28 per cent (81 million rai or 13.36 million hectares), despite logging concessions having been halted in 1989. Not only had the concessions themselves degraded the forests, they had attracted people to dwell within the forest areas and establish livelihoods around the export of cash crops (Ganjanapan 2000).

Phongpaichit and Baker (2002) explain the opening up of the upland areas of Thailand from the 1950s as a result of the world trade in agricultural goods. From 1950 to 1995 forest land decreased from 198.2 million to 82.2 million rai, while agricultural land increased from 51.7 million to 132.5 million rai in the same period. Phongpaichit and Baker (2002) point out that the massive increase in population in the uplands was largely a result of "peasant colonisation" (i.e., people moving into the areas) and only partly a result of natural population increase among residents.

The government has accelerated the demarcation of forest reserves since logging concessions were banned in 1989. However, reforestation in Thailand has not compensated for deforestation because reforestation is undertaken mainly using a single species (ONEP 1997). The degradation of forest resources, both in terms of quality and quantity, is linked to environmental impacts such as the depletion of soils, land, water and biological resources, and has been associated with serious natural disasters such as landslides.

Forest management and the emergence of conflict between the forest administration and local people

Since the Royal Forest Department (RFD) was established in 1896, all unoccupied natural forests have belonged to the state. When the RFD was established, the economic influence of the British in Burma and India led the Thai government to

[4] One hectare is a little over six rai.

enforce forest concessions throughout the country (Chaitup 2002). This concession regime continued for 132 years during which more than 230,000 square kilometres were logged. In addition, large-scale monoculture (especially fruit trees, maize, cabbages, cassava and sugarcane) has been promoted since the 1970s. These economic priorities resulted in a rapid decrease in forest cover.

In 1988, hillsides in the southern provinces collapsed during an intense rainstorm, hundreds of people were killed and land and property were damaged. The erosion was attributed to deforestation. At about the same time there was increasingly strong public opposition to forest concessions in several areas, especially in the northern provinces. These incidents led to the government declaring a nationwide logging ban in 1989 (ICEM 2003). The subsequent forest management strategies have focused on intensive tree plantations and the declaration of conservation forests.

The conservation policy began in 1960 when the government endorsed the Wildlife Reservation and Protection Act (amended 1992). The National Parks Act was passed in 1961 and Khao Yai was declared as the first national park in the country. These two acts contain the procedures of establishing and managing protected areas primarily for wildlife sanctuaries and national parks. The management objectives of parks and sanctuaries are biodiversity conservation, recreation and watershed management. In 1964, the National Forest Reserves Act was enacted to provide the establishment of national reserved forests. The act designates forestland for other purposes besides strict protection. Besides these separate acts, there are also Cabinet resolutions that declare valuable forest areas to be managed for special purposes. One example is the watershed classification policy, which states that Watershed Class 1 and 2 will remain protected; other examples are mangrove conservation and biosphere reserves (NESDB 2004). Table 2 provides the number of protected areas in Thailand and the total area in each category.

Table 2: Protected areas in Thailand, by category

CATEGORIES	COINCIDES WITH IUCN PROTECTED AREA CATEGORY*	NUMBER	TOTAL AREA (SQ. KM.)	PERCENTAGE OF TOTAL COUNTRY AREA
By Royal Decrees				
- National Park	II	114	63,464.33	12.37
- Wildlife Sanctuary	Ia & Ib	59	36,758.53	7.16
- Marine National Park	II	27	8,627.62	1.68
- Non-hunting Area	VI	55	4,409.59	0.86
By Ministerial Declarations				
- Forest Park	III	68	870.49	0.17
- Botanical Garden	VI	15	58.96	0.01
- Arboretum	VI	54	36.08	0.01
By Cabinet Resolutions				
- Biosphere Reserve	VI	4	261.00	0.05
- Watershed Class 1 and 2	I, II, IV & VI		93,090.00	18.14
- Conservation Mangrove	VI		428.00	0.08

Source: National Park, Wildlife, and Plant Conservation Department (2004).

*Note: *Category Ia – Strict Nature Reserve: Protected area managed mainly for science; Category 1b – Wilderness Area: Protected area managed mainly for wilderness protection; Category II – National Park: Protected area managed mainly for ecosystem conservation and recreation; Category III – Natural Monument: Protected area managed for conservation of specific natural features; Category IV – Habitat/species management area: Protected area managed mainly for conservation through management intervention; Category V – Protected landscape/seascape: Protected area managed mainly for landscape/seascape conservation and recreation; Category VI – Managed resource protected areas: Protected area managed mainly for the sustainable use of natural ecosystems.*

The different categories of protected areas in Thailand are proclaimed by different means. Some are proclaimed by royal decrees and others by ministerial declarations or Cabinet resolutions. All national parks (terrestrial and marine) are proclaimed under the National Park Act (1961). Wildlife sanctuaries and non-hunting areas are proclaimed under the Wildlife Reservation and Protection Act (1960). Forest parks, botanical gardens, arboretums, conservation mangroves and biosphere reserves, which are all mostly in forested areas, fall under the National Forest Reserves Act (1964). The regulations for Watershed Class 1 and Watershed Class 2 may overlap with other categories, such as national parks or reserved forests, so which regulations they are under varies.

A major change in the national forest policy occurred after the logging ban was imposed in 1989 (Chaitub 2002). In March 1992, the Cabinet passed resolutions to conduct land use zoning on forestlands under national reserve forests. The forest zonings divided forests into three major zones: conservation forest (zone C) - 88.23 million rai (27.56%); production forest (zone E) - 51.89 million rai (16.16%); and agricultural zone[5] consisting mainly of land under mono-crop agriculture inside the reserved forest–7.2 million rai (2.21%).

Consequently, the Seventh National Social and Economic Development Plan (1992-1996) required that 40 per cent of the country be maintained as forest cover (ICEM 2002), of which 25 per cent was to be preserved as protection forest and 15 per cent allocated as production forest. The preparation of the Thai Forestry Sector Master Plan began in 1991 (Roonwong 2002) with assistance from the Finnish Department for International Development Co-operation (FINNIDA) and UNDP. A major concern in the master plan was the inability of the RFD to manage forests without the participation of local people. The master plan was submitted to the National Forest Policy Committee in 1997. Many elements of this plan were adopted as part of Thailand's Eighth National Social Economic and Development Plan (1997-2001), which urged increased local participation in the management of natural resources.

More recent national policy in the form of the "Policy and Prospective Plan for Enhancement and Conservation of National Environmental Quality, 1997-2016" sets long-term policies, goals and guidelines to ensure adequate protection for plant genetic resources. The plan recommends that a clear master plan should be developed for the management of each protected and reserved forest, as well as recommending the rehabilitation of degraded forest, especially in watershed areas, and the promotion of buffer zones and community forestry (Wongbunthit 2002).

The current Ninth National Social and Economic Development Plan (2002-2006) emphasises two objectives for forest management. The first is to improve administrative mechanisms for transparency and accountability through the decentralisation of forest management to local administrative organisations and communities. The second objective is to ensure a balance between the sustainable use of forest products, protection and rehabilitation, while supporting the livelihoods and economic development of people at the grassroots level (Wongbunthit 2002). This plan is based on Thailand having 25 per cent of the country as conservation forest and targets at least 1.25 million rais of mangrove forest for protection.

After the imposition of the logging ban, the government's forest management focus shifted from commercial purposes towards strict conservation and reforestation. This led to increased declaration of protected areas and to relocation regimes for communities living in targeted protected sites. Thus, conflict between the government agencies and forest-dependent communities rose dramatically. The existing policies were analysed by grassroots-based NGOs, POs (people's organisations) and academics, which showed a fundamental lack of recognition of the need for people to participate in the forest management process. Loopholes for corruption and illegal logging by influential people were exposed (Roongwong 2002). However, the government effort to declare the remaining forests protected has continued in a fashion that ignores the rights of the many local communities, especially hill-tribes, who have been

[5] Land in this zone was later given to the Agricultural Land Reform Office to allocate to landless people.

living in forest lands for generations. Moreover, the government's forestry policy fails to recognise that relocation was not an appropriate strategy, but rather impaired local livelihoods and led to cultural degradation.

Historically, the relationship between the RFD and forest dwelling local communities has often been conflictual. Ironically, although the rapid decrease in forest areas described above was mostly a result of logging and clearing for agriculture, forest dwellers have continually been blamed for causing deforestation, especially through shifting cultivation. The extent of their contribution to deforestation is open to dispute, but, given the undeniable role of "peasant colonisation" and agricultural expansion, the extent to which they have been blamed is clearly disproportionate. The important point, however, is that perceptions of forest dwellers as forest destroyers have justified policies which deny forest resources to local people and which justify forced relocation.

The enforced relocation of people for forest conservation has a long history. In the 1980s, the RFD began its attempts to move people from degraded land in order to reforest (Phongpaichit and Baker 2002). In 1991, the army began to implement a plan to relocate about six million people from designated forests under a programme known as Kho Jo Kor (Phongpaichit and Baker 2002). The involvement of the army in forestry issues was partly a legacy of the communist insurgency of the 1970s into the 1980s, in which insurgents often hid in forested areas. The history of forced relocation and conflicts between forest peoples and government agencies (including the RFD and the army) is the background to a legacy of conflict between the RFD and local people. This is evident in the ongoing debate over the various versions of the community forestry bill.

The community forestry movement[6]

Despite the policy emphasis on conservation and reforestation, deforestation and degradation through encroachment and illegal logging in Thailand remained serious, even within the protected forests. It has been clear that the centralised policies were not effective for managing forest resources in a sustainable way. The overall policies neglected the people's participation and ignored traditional knowledge of forest management. In response, the grassroots-based NGOs and rural and indigenous communities promoted a new, alternative forest policy through a proposed community forestry bill. This bill was conceived as a tool to increase people's participation in forest management and as an approach to forest management that is more appropriate to different local contexts. The public was exposed to this movement since 1989 when the logging ban was imposed. Despite fifteen years of efforts, this advocacy campaign has not yet led to community forestry legislation being passed. There were many issues and perspectives involved, especially revolving around the values that different stakeholders have held.

During the logging concession period, government and private companies played major roles in decision-making. People living in the concession sites often had no voice as the full authority to manage forest areas belonged to the government. However, local people who witnessed the results of uncontrolled logging that caused severe forest degradation started a protest movement in the 1980s. The coalition of local communities, students, academics, environmental and rights-based NGOs grew steadily to oppose large-scale dam construction projects and logging concessions (ICEM 2003, Makarabhirom 2000).

The rapid declaration of protected areas to reach the 25 per cent goal of national cover, combined with inappropriate local involvement in the demarcation process as well as ignorance of traditional land use and management, created further disputes (Anon 2004, Chaitub 2002). In 1998, 460,000 households (approximately three million people) mainly from hill tribes in northern and western Thailand, resided in the protected and watershed areas (Anon 2004). The official attitude, under which people had to be barred from forests, restricted protected forests for any direct utilisa-

[6] The following discussion of the community forestry movement draws heavily on Makarabhirom (2000).

tion and community settlements. It led to government-imposed policies to relocate communities located within park boundaries several times, regardless of how long these communities had been settled. The result was that many people were arrested as trespassers on their own lands that they had cultivated for generations.

The conflict situations were an important driving force behind the community forestry bill movement. The movement is against relocation and popularly supported versions of the bill would give local communities legal rights to protect their territories. It would recognise traditional dependency on forest resource for subsistence living, as well as promoting the traditional knowledge of utilisation and management of natural resources. Furthermore, it would allow collaborative management that includes mechanisms of checks and balances between forest-dependent communities, the government and other sectors of society.

Following the lobbying of civil society groups in support of a community forestry bill, in 1992 the Royal Forest Department proposed the first draft community forestry bill, which was largely a set of rules and regulations to allow local people to participate in government reforestation schemes (Makarabhirom 2000). In 1993, a group of academics, NGOs and researchers drafted an "alternative version" that was based on a three-year national research programme. The programme documented local forest management systems implemented through collaboration involving Chiang Mai University and grassroots-based NGOs. In 1996, a "compromise version" embracing the two earlier drafted versions was developed. The Cabinet approved this compromise version and the principles of the bill. However, the bill sparked an outcry from a range of conservationists who disagreed with the idea that community forest could be established in protected areas. Subsequently, in 1997 the government called three public hearings and further revised the compromise version. There was no consensus from the public hearings and NGOs and grassroots networks, which believed the process had been dominated by political powers, did not accept this revision.

The new Constitution of 1997 had important implications. The Constitution allows Thai citizens to draft and propose any law for government consideration if the signatures of more than 50,000 supporters can be collected. The Assembly of the Poor (AoP), an umbrella group of people's organisations, drafted a "people's version" of the community forestry bill. This draft was based on the 1993 alternative draft and incorporated the provisions of the new Constitution, which highlighted people's participation in natural and environmental resource management. A campaign successfully gathered 52,618 signatures from the public, locally and nationally (Makarabhirom 2000). At the same time as this people's version bill was proposed to the government, five more versions were developed by five political parties; each party wanted to stake its own claim through this legislation. These six draft bills were essentially similar in form, but there were some differences in the details, including positions on the establishment of community forests in protected areas, the utilisation of forest products (particularly timber) from community forests, the funding and subsidising process and the structure of committees in national, regional, provincial and local levels. In 2000, the parliament approved principles of the six drafted community forestry bills and appointed a parliamentary commission with twenty-two members to finalise the draft for the second reading.

During 2001–2002, the parliamentary commission put together the six drafts and proposed a consolidated bill to the Senate for the second reading. The final version allowed the establishment of community forests in protected areas under a set of strict conditions for the communities that propose community forest in these areas. However, lobbying among the senators was actively carried out by the representatives of national-centred rather than community-centred groups. The bill was not approved by the Senate and was referred to the Cabinet again before a second submission to the Senate. Subsequently, the process was delayed for various reasons, including elections.

The current situation is that a "people-friendly" version of the bill was passed by the lower house in 2004 and then rejected by the Senate. The bill

was once again referred to a committee to be amended and the matter, as of April 2005, remained unresolved. Generally, the history of the community forestry bill can be understood in terms of the presentation of a series of people-friendly and anti-people versions being put forward by one side and rejected by the other. The debate continues.

Makarabhirom (2000) identified three major interest groups in terms of this process.[7] These groups are: national-centred, community-centred and government-centred. The national-centred group has mostly green conservationist members who have strong conventional conservation beliefs in which the utilisation of natural resources should not be allowed in natural forests. The community-centred group primarily consists of grassroots-based NGOs that work closely with local people, academics including anthropologists and sociologists, field-based social foresters and networks of people's organisations that consist of rural and indigenous forest-dependent communities from all regions. This group is concerned with participatory decision-making processes and the sustainable livelihoods of local people. The group recognises that maintaining traditional forest management systems that allow utilisation together with local norms, beliefs and regulations is essential to bringing about sustainable forest management. The group, as the main supporter of the community forestry bill from the beginning, points out that more than 800,000 people are permanently included in the protected areas, where they had resided long before the declaration of the protected areas. The government-centred group consists primarily of government staff and influential politicians.

The first two groups comprise not only NGOs but also academics and people's networks. There is a popular tendency to categorise NGOs involved in conservation into two categories. In this view the "dark green" NGOs are focused on conservation that excludes people from dwelling within and using forests. The "light green" NGOs are NGOs that tend to combine conservation concerns with human rights and development concerns. While this categorisation is probably too simplistic, it does usefully draw attention to quite different approaches to conservation and forest management within civil society. Interestingly, it has been the improbable coalition between the RFD and the "dark green" (primarily middle class and urban) NGOs that has effectively blocked the passing of the community forestry bill.

Government policies of decentralisation and participation

The government has been trying to adjust to pressures from the public and growing calls from NGOs and POs for emphasising active participation in forest management. Changes were initiated essentially in the context of existing forest legislation. Several divisions under the former Royal Forest Department (now divided into three major departments) have integrated participatory approaches into their day to day work, at least in theory. For example, the Watershed Management Division, in collaboration with some international agencies, has implemented integrated watershed management which involves hill-tribe communities in land-use planning, reforestation and alternative income-generation, in order to mitigate the impacts of traditional shifting cultivation activities. The Community Forest Management Division has been dealing directly with community forestry extension. Its role in the past decades was establishing woodlots in the communities and the promotion of local/urban participation in forest management in general. Initially, community forestry was targeted primarily on degraded public lands or private lands.

Following the 1997 Constitution, the government was urged to launch supportive laws and to reform policies that appeared to be in conflict with the

[7] They were identified in the context of the debate up to about 2000, but the classification is still relevant.

Constitution. One response from the RFD was to revise the responsibilities of the Community Forest Management Division in 2000 so that it could promote community forestry management in reserved forests. Consequently, many communities that had previously been managing community forests in national reserved forests[8] started to be recognised legally through the division's registration process. This process, however, was essentially tokenistic and did not involve the recognition of rights.

Several pilot projects on buffer zone management were undertaken by both NGOs and government in and around protected areas, especially national parks and wildlife sanctuaries. In 2000, the Western Forest Complex Ecosystem Management Project (WEFCOM) was launched as a collaborative project between the Thai and Danish governments, local academics, local communities and NGOs. A pilot project entitled "Community Participation in National Park Management (CP-NPM)" was launched by the Royal Forestry Department and the Ministry of Agriculture and Cooperatives in August 2001. According to Roonwong (2003), this project was "a direct result of the new Constitution and growing sentiment towards community participation in forest management in Thailand."

Although these and similar pilot/experimental projects have important implications for continued learning, Roonwong (2003) found that stakeholders at the project site had a low level of satisfaction. One informant stated that "from the beginning the project had no clear methodology in working with [the] local community" (ibid.). Another informant felt that there was no local involvement in the planning phase. These observations are consistent with the view that participatory and collaborative forest management projects in Thailand do not involve the devolution of decision-making power.

In 2004, experiences from the earlier pilot projects encouraged the National Park, Wildlife and Plant Conservation Department (DNP) to launch a project entitled "Joint Management of Protected Areas (JoMPAs)" supported by the Danish government through the Danish International Development Agency (DANIDA). The project is to be implemented from 2004-2008. It is hoped that this project will facilitate the DNP to work with local communities and NGOs to seek suitable mechanisms to establish integrated conservation and management. These projects are experimental and the experiences from them will help to determine future directions of policy and practice.

Current state of forest governance

Governance at the national level

Thailand enacted its new Constitution in 1997. This document, known as "the people's Constitution," gives increased emphasis on the rights and participation of individuals, organisations and local authorities. For example, Item 46 states that local communities have rights to manage and maintain the sustainable use of forest resources. Item 56 gives management rights to individuals. Item 58 provides the rights of individuals to access news and information. Item 59 gives an opportunity for people to openly express their ideas (Ganjanapan 2000).

There are three major changes since the new Constitution came into force that resulted in more power and authority being given to the local governments. Firstly, the Government Decentralisation Act of 1999 defined the roles and responsibilities as well as specific mechanisms for planning and budgeting from the central government down to the smallest functioning government administrative level—the tambon. Secondly, government administrative reforms were introduced in October 2002, through the Act of Ministries and Departments. Twenty new ministries were established, resulting in an adjustment of the mission and role of each ministry. The government introduced statutes that

[8] It is important to realise that there are large numbers of forests managed by village communities through local institutional arrangements, usually in the absence of legally-recognised rights. These range from traditional management systems among the hill tribes to rather formally structured village organisations.

promoted all government sectors to begin the reform process by making a shift toward good governance policies. Thirdly, the government initiated a holistic approach to provincial administration. This involves a team effort led by the provincial administrative committee. The provincial governor acts as chairman of the committee, in his capacity as chief executive officer–the so-called "CEO governor." This change gave the governor more authority than before to directly respond to situations and requests within the province. In 2003, the Cabinet required all provinces (except Bangkok) to adopt this holistic approach to provincial administration.

Forestry institutions were restructured as a consequence of the government's emphasis on decentralisation. The Ministry of Natural Resources and Environment was established and the former RFD became part of that larger ministry. The structure of the new ministry remains somewhat unclear as there have already been discussions about recombining the RFD and the Department of National Parks, Wildlife and Plant Conservation, though a formal announcement is pending.

The RFD was divided into two departments, one using the name RFD and the second using the name Department of National Parks, Wildlife and Plant Conservation. More than 7,000 Royal Forest Department staff was transferred to other departments. This has left 1,100 staff in the RFD, which retains the role of promoting forestry to boost national revenues and enforcing the Forestry Act (1941), the Forest Reserve Act (1964) and the Forest Plantations Act (1992). The new Department of National Parks, Wildlife and Plant Conservation is responsible for enforcing the National Park Act and the Wildlife Act (1992).

Decentralisation in forest governance

Thailand has been promoting decentralised governance since the early 1990s. The 1997 Constitution recognised the participation of local people and organisations in managing their natural resources. It refers to people's participation in forest management and the clarification of land-use issues (Pragtong 2003).

Tambon administrative organisations (TAOs) were set up under the Tambon Administrative Act in 1994 at the tambon (sub-district) level (Dupar and Badenoch 2002). The TAOs are responsible for local development planning and implementation. They are supported by annual budget allocations from the central government. Responsibilities include: health, welfare, education, infrastructure and natural resource management. TAO councils consist of a combination of elected and appointed members. Plans and budgets are formulated through a bottom-up process, involving the kamnan (sub-district headman), village representatives and officers from the Ministry of Interior. The budgets and plans are based on submissions by the villages.

TAO responsibilities include natural resource management, however, natural resources are not always a priority. Dupar and Badenoch (2002) point out that:

> *Thailand's tambon reforms hold great promise for local empowerment through representative democracy. If local democracy functions well, it is to be expected that local development plans and projects would be highly responsive to [the] people's livelihood priorities. Given that most people make their living off the land, it would be expected that priorities would also align with objectives for natural resources management. The evidence from Mae Chaem (a case study discussed by the authors), however, indicates that representative democracy does not necessarily elevate the environment to the top of the local government agenda, even for a natural resources-dependent population.*

While the structural reforms of government in Thailand involve a high level of commitment to decentralisation, these reforms fit uncomfortably with the RFD's "traditional mandate" and the attitudes of RFD staff (ibid.). A considerable body of literature discusses the forestry profession in Thailand in terms of an organisational and professional culture that is based on scientific forest management by experts and the idea that forest bureaucracies have both the sole responsibility and right to manage forests on behalf of the nation state (for

examples, see Lang and Pye 2000, Laungarasmsri 2001, Vandergeest 1996.) While it is important to recognise a divergence of opinion within the RFD, with many officers supporting community interests and efforts privately and at the local level, there is a strong strand within the bureaucracy that rejects any suggestion that local people have rights to use forests and that these rights should be accommodated. Generally, despite the experimental participatory projects described above, the ministry and RFD as institutions have been vocal opponents of community forestry and people's rights to resources.

It is important to mention here that decentralisation has little relevance to the management of protected areas because they are subject to separate national legislation. In this context, the debate over the community forestry bill remains crucial, as possibly the main sticking point is whether (and how) community forests might exist and function within protected areas.

CASE STUDY

Pred Nai community mangrove forest

It is difficult to present a case study that addresses the various dimensions of forest governance issues in Thailand. The situation in protected areas is different from the situation in other forest type areas. The case study we have selected illustrates a number of key points about the way forest governance can work, but we do not suggest that it is representative of the situation as a whole. We have chosen not to look at a case study involving governance of a protected area, because the situation in protected areas is relatively straightforward–there is no effective decentralisation of governance.

Pred Nai, in eastern Thailand, is a village near the Cambodian border in Trat province (Figure 1).[9] The village is adjacent to a significant area of mangrove forest, a large part of which falls within village boundaries. In recent years, the villagers at Pred Nai have taken vigorous steps to protect the forest, largely through the development of strong institutional arrangements at the local level and through networking with other villagers and elements of civil society and government.

It is important to recognise that the mangrove is formally under the authority of the RFD, although the RFD has had little direct interest in managing it. For many years the forest was increasingly degraded as a result of logging concessions that logged the mangrove intensively to produce charcoal. These logging concessions were granted by the government to outsiders. At the same time, damage was done to the mangrove ecology by locals (including people from neighbouring villages) involved in shrimp farming, which was being actively promoted by the government.

In 1986 the Pred Nai villagers initiated a group to try to prevent these activities and were successful in stopping the logging. However, the harvesting of marine life by outsiders continued to be a problem and led to declining marine life populations which compromised local livelihoods. A particular concern was the grapsoid crab (Metopographus sp.), which was commonly collected and sold for use in salads.

The villagers were involved with a number of restoration activities following the end of logging. Trees were planted in degraded sites within the mangrove. Regulations were developed to limit the collection of crabs in the breeding season (enforced in 1997). Later, with the cooperation of staff from the Regional Community Forestry Training Center (RECOFTC) in Bangkok, work began on the development of a management plan.

The most important activity was the development of cooperation with local politicians, academics, officials from various government departments and people from other villagers. Gradually a net-

[9] A more detailed account of Pred Nai is in Kaewmahanin, Sukwong and Fisher (2005).

work of villages with interests in mangrove management was developed and formalised as the Community Coastal Resource Management Network, Trat Province in 2000. Thus, what began as a local initiative gradually developed into a broader people's movement.

There were a number of tangible achievements arising from this initiative. Aquatic life for harvesting increased and led to improved incomes and livelihoods for a significant number of people involved in crab collection. For example, in 1998 six collectors were involved in grapsoid crab collection averaging about THB 400 (USD 10) per day based on an average yield of 8 kg/collector/day. By 2003, thirty collectors averaged 15 kg/collector/day, which sold for THB 600 (USD 15). An increase in income from mud crab collection was also reported.[10]

The condition of the mangrove and biodiversity improved with many species either becoming more common or returning. This included marine species, birds and possibly macaques. Benefits were also associated with increased organisational and management capacity. As their confidence grew, the villagers established a village savings fund in 1995. By 2004, the fund held about USD 72,000.

There is now a strong and growing community-based mangrove management movement in eastern Thailand, which is largely a development from the Pred Nai initiative. Pred Nai was widely acknowledged as an excellent case (even a model) for community-based natural resource management, obtaining recognition in the form of prizes and short-listing by the Equator Initiative (2004).

These achievements do not mean that everything worked perfectly. There were serious conflicts within the community, especially as to whether the emphasis should be on conservation or sustainable use. Members of the earlier committee were particularly concerned with conservation and were reluctant to allow much use of the mangrove resources. However, compromises were reached through discussion and negotiation, and there was even a democratic change of committee which reflected a shift in focus towards increased and sustainable use.

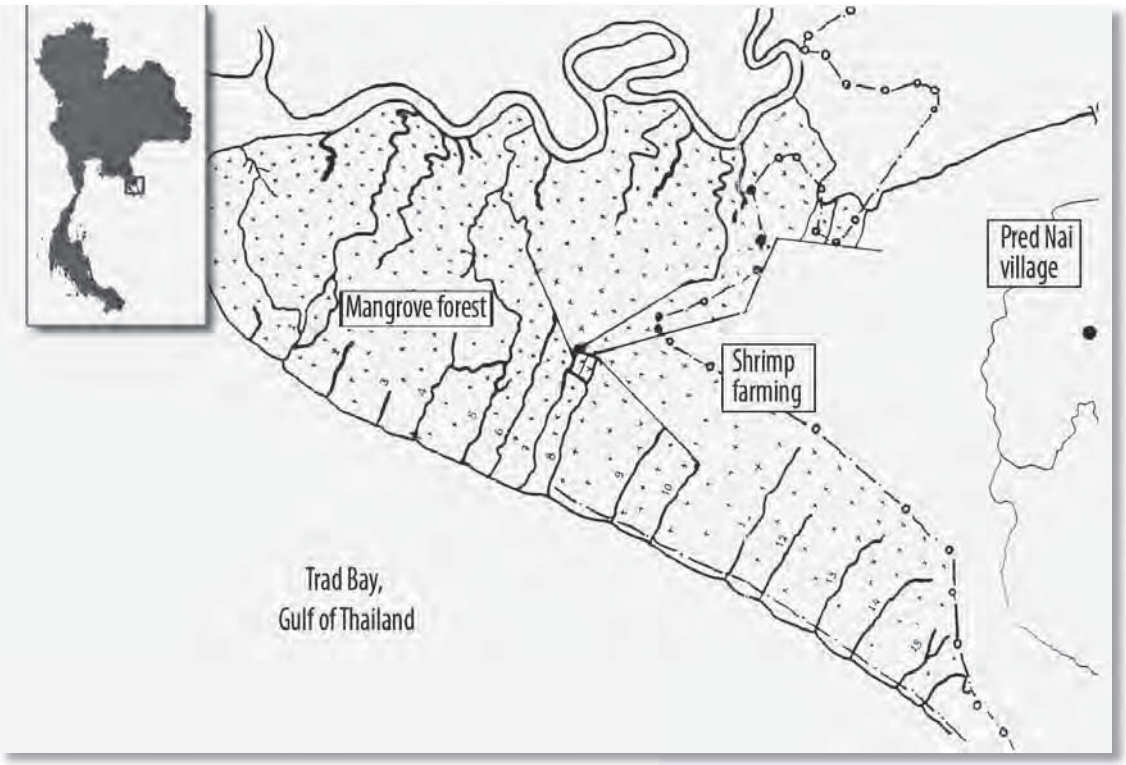

Figure 1: Location map of Pred Nai village, Trat province, Thailand

[10] Data collected by Supaporn Worrapornpan in early 2004.

The Pred Nai case demonstrates a number of important points about forest governance in Thailand:

- This case provides clear evidence that local communities can manage forests effectively and certainly better than they had been managed under the previous state-managed regime.
- The success of the Pred Nai community forest was not the result of a government programme, or even a pilot project. Technically, the forest was and remains under the legal authority of the RFD. The community forestry activities occurred without any real legal authority. Although the RFD was not formally involved, local RFD officials recognised the value of the work and did not interfere. The Department of Fisheries provided important help with aspects of management of fish and aquatic animals. Successful community involvement in forest management and "governance" does not necessarily require formal legal status. Many community forests in Thailand operate under informal arrangements with informal support or toleration from RFD officials.
- The effectiveness of the Pred Nai initiative was strongly influenced by the extent to which community members collaborated with civil society, including academics who provided technical expertise and with officials from various government departments.
- The development of a network of other mangrove-oriented villages empowered the communities in terms of their ability to maintain control of their forests. The networking was initiated by the community and only later supported by the RECOFTC.
- The local government has worked collaboratively with the community in line with the official emphasis on decentralisation.

The main lesson from this case study, in terms of forest governance, is that the involvement of varied actors, including civil society, can provide the context for effective forestry governance.

Conclusions

This chapter has reviewed the history of forest governance in Thailand and looked at a selection of contemporary issues. We have looked particularly at the extent to which some level of effective decision-making power has been devolved to the local level and at the degree of pluralism in forest governance.

One clear conclusion is that while decentralisation is a major theme in government and has been an important development in general, it has not occurred to any great extent in forestry. There is little effective devolution of decision-making in forest management in Thailand. Although the local government administration (TAO) legally has a role in natural resource management, in practice the TAOs have not prioritised this issue. We would suggest that it is probably because the RFD has shown little inclination to relinquish its control of forest resources. In the case of protected areas, the relevant legislation places the authority at the central level. It is precisely in regard to people living in protected areas that the issue of devolution is most acute.

Where effective local level decision-making does take place, this tends to occur as a result of strong informal local institutional arrangements in the form of locally declared and managed community forests. In these cases, as in the case of Pred Nai, decision making does occur locally (at the community level), but the decisions about forest use and management have no legal status. Local management of forests occurs either because of the disinterest of the RFD or (as is often the case) with the informal acknowledgement or support of the local RFD staff, who have the formal authority to enforce forest regulations and policy, but do not

always actively do so. The local RFD staff certainly recognises that the Pred Nai community are contributing to forest conservation.

The great strength of the community forestry movement is the extent of support it receives from civil society. Local efforts are strengthened by the formation of such organisations as the mangrove network described in the Pred Nai case study. They are also supported in various ways by NGOs and academic activists. The support ranges from technical support to lobbying.

This sense of forest governance as being ideally based on collaboration between different groups of local communities, civil society and the RFD and other agencies is reflected in Figure 2, which presents a model of how participants in a workshop on good forest governance believed that forest governance should work. The key points to note are the pluralism, evident in the roles of a range of actors, and the emphasis on collaborative learning. These themes continually emerge in discussions of community forestry in Thailand and discussions of forest governance are generally about community forestry.

If the strength of community forestry in Thailand is the existence of a strong civil society movement focused on community action and conservation, the absence of much government support for this movement is probably a major constraint. The RFD typically sees the civil society movement as a threat and the current government of Prime Minister Thaksin has been repeatedly critical of NGOs and about their work on natural resources and their activism generally.

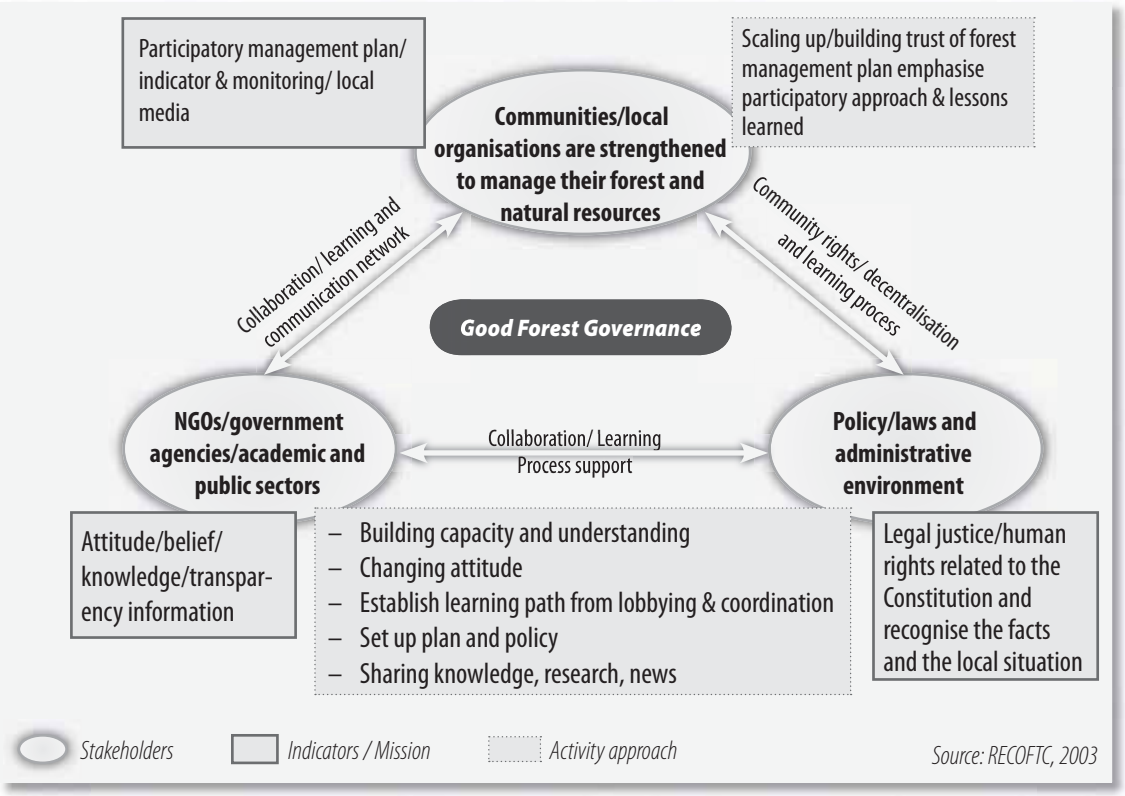

Figure 2: State of good forest governance in Thailand

Policy recommendations

It is difficult to make meaningful recommendations about ways to improve forest governance when the responsible agencies are reluctant to accept change. Changes to governance, at least in regards to increasing pluralism and people's participation, are likely to be the outcome of political processes, not planned intervention.

Nevertheless, we would like to make the following broad recommendations:

1. In order to recognise the needs of people living in and around forests in Thailand, their rights to use natural resources (as declared in the Constitution) and their demonstrated capacity for sustainable management, legislation on community forestry needs to be passed. It is essential that this legislation includes the right to establish community forests in protected areas.

2. In order to help decentralisation develop practically, there is a need to enhance the capacity building of local government staff including the regional, provincial and TAO levels, particularly in terms of understanding participatory principles and practice. Many local government staff, especially in the TAOs, play the main role in managing natural resources at the local level, but lack this understanding.

3. The lessons learned and research results from many government pilot projects and NGO projects need to be considered seriously in policy development and revising existing forest laws.

Acknowledgements

The authors wish to thank Attjala Roonwong for providing essential information to assist in drafting this paper.

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7

FOREST GOVERNANCE IN VIET NAM

Do Dinh Sam[1], Hoang Lien Son[2] and Le Quang Trung[3]

[1] Forest Science Institute of Viet Nam (ddsam@netnam.vn).
[2] Forest Science Institute of Viet Nam (dodinhsam@yahoo.com).
[3] Forest Science Institute of Viet Nam (lqtfsiv@yahoo.com).

Introduction

Since the introduction in 1986 of the economic reforms known as *Doi Moi*, Viet Nam achieved remarkable economic growth rates that have contributed significantly to poverty reduction. However, the growing demands of industry combined with an expanding population have increased pressure on upland forests. Establishing an effective forest management system in this setting is difficult, yet essential.

Forest governance in Viet Nam has evolved in line with the changing forest management objectives of the state. After independence, the state developed a sophisticated hierarchical structure to control the extraction, processing and distribution of forest resources. This system led to the over-harvesting of natural forests and their rapid clearance to create land for agriculture. With forest management in a state of crisis, the government introduced a process of decentralisation to provide opportunities for local people to manage and benefit from forests and to provide them with avenues to utilise local knowledge and customs in forest management. Forest governance thus evolved from traditional forms of management in pre-colonial times to a system characterised by heavy state control and involvement after independence to a more pluralist system. In this chapter, we follow the evolution of forest governance in Viet Nam and assess the implications of decentralisation for sustainable forest management and rural development.

Country overview

Viet Nam is located in South-east Asia on the Indochina peninsula. The country has a total terrestrial area of 330,991 sq km. Viet Nam is a narrow country that borders China, Lao PDR and Cambodia, with a 3,260 km long S-shaped coastline that stretches northwards from the Gulf of Thailand to the Gulf of Tonkin.

The topography of Viet Nam is complex with three-quarters of its territory consisting of mountains and hills. The highest mountain is Fan Xin Pang (3,143 m), which lies in the north in the Hoang Lien Son range. Another feature is Viet Nam's many plateaus, such as Moc Chau (900 m) in the north, and Lang Biang (1500 m), Di Linh (800-1000 m) and Dak Lak (600 m) in the central highlands, many of which contain basaltic soil. Viet Nam has a dense river system of approximately 2,360 rivers. The three major rivers are the Red River and the Da River in the north, and the

Mekong River in the south. The two biggest deltas are the Red River Delta and the Mekong River Delta.

Viet Nam's climate is influenced by its topography and monsoons. Viet Nam is located in the tropical and temperate zones, with a tropical climate in the south and a monsoonal climate in the north. Its climate is further divided into two distinct seasons - the cold season from November to April and the hot season from June to October - with high yearly average temperatures and rainfall. The annual mean temperature of most regions fluctuates from 20-25˚C and the average annual rainfall is over 2,000 mm, though there is considerable variation throughout the country.

The population in 2003 was 80.9 million (Statistical Yearbook 2004), of which 74% are rural dwellers (FAO 2005, 179). The population density is about 245 people/km^2, one of the highest in Asia, but drops to 35-75 people/km^2 in some mountainous areas (Statistical Yearbook 2004). The population growth rate has decreased gradually to 1.47% in 2003 (ibid.); nevertheless, the population will continue to expand for at least several decades exacerbating the existing demands on upland forests and critical river watersheds. About 20-24 million people live near forests or in mountainous areas.

Fifty-four ethnic groups inhabit Viet Nam. The Kinh people (or Viet people) are the majority ethnic group, accounting for nearly 85% of the total population, and greatly influence the country's political and economic affairs. They are concentrated in the coastal plains and alluvial deltas. The minority ethnic groups mostly reside in the mountainous areas and derive their livelihoods from traditional agricultural systems, including irrigated rice and long-rotation rain-fed farming at higher altitudes. Some ethnic groups such as the Dao, Tay, Nung, Thai and Muong employ both systems. Traditionally, the H'mong practised shifting cultivation and moved their settlements accordingly.

The central role of the Communist Party in politics and society was reaffirmed through Article 4 of the new Constitution that was adopted in 1992. The Communist Party and the executive agencies created by the 1992 Constitution - the offices of the president and the prime minister - are the major powers within the Vietnamese government. The National Assembly is the highest governing body with a wide mandate to supervise all government functions. According to Article 7 of the Constitution, "elections to the National Assembly and the People's Councils are held in accordance with the principles of universal, equal, direct, and secret suffrage." The National Assembly elects the president, who acts as the head of state, and the prime minister, who is responsible for forming the Cabinet. People's councils are chosen by the electorate at the levels of province, town, city, district, ward, and commune.

In 1986, Marxist economic planning was formally abandoned and a broad economic reform package called *Doi Moi* was introduced. The *Doi Moi* policy was designed to transform Viet Nam from a centralised, subsidised economy to a market-oriented economy. It involved a reduction of the role of government, especially in production and trade, and the decentralisation of planning and decision-making to provincial and district levels.

The policy was successful from a macro perspective. Since 1990, Viet Nam has been the world's second fastest growing economy. In 2003, GDP per capita was USD 2,490 (purchasing power parity) and from 1990-2003 its human development index increased from 0.617 to 0.704, ranking it 108 out of 177 countries (UNDP 2005). Agricultural productivity has improved to the extent that Viet Nam is now the world's third largest rice exporter (Statistical Yearbook 2004).

Viet Nam is described in the Human Development Report 2005 as a dynamic, high-growth economy. The report elaborates as follows:

> *Some countries have registered an extraordinary rate of advance towards the MDGs [millennium development goals], often from very low levels of income. Viet Nam is one. Income poverty has already been cut in half, falling from 60% in 1990 to 32% in 2000. Child mortality rates have fallen from 58 per 1,000 live births (a far lower rate than income would predict) to 42 over the same period (UNDP 2005, 45).*

The report attributes these achievements to: a) investment in human development, especially education, b) broad-based, inclusive growth, c) a commitment to equity, d) gradual liberalisation, and e) market diversification (UNDP 2005, 121-2).

In spite of these achievements, most farmers survive on a low income, especially in the remote, mountainous areas. Table 1 indicates that large regional differences in economic standards exist.

Table 1: Indicators of rural poverty in different ecological zones (1999)[2]

ECOLOGICAL ZONES	TOTAL GDP OF AGRICULTURAL SECTOR (BILLION VND)	AGRICULTURAL POPULATION (MILLION PEOPLE)	GDP OF AGRICULTURE PER CAPITAL (000'VND)	% OF POOR HOUSEHOLDS	AGRICULTURAL AREA (1000 HA)	AVERAGE AGRICULTURAL LAND/PERSON (HA/PERSON)
Red River Delta	9,632	10.9	884	29	799	0.07
Northwest	6,452	8.8	733	59	969	0.11
Northeast	1,367	1.9	719	59	964	0.51
Northern Central	5,996	7.9	759	48	739	0.09
Southern Central	4,236	4.5	941	35	446	0.10
Central Highlands	3,528	2.3	1,534	52	549	0.24
Eastern South	7,788	4.9	1,589	8	1,340	0.27
Mekong River Delta	21,895	12.1	1,810	37	2,819	0.23

Source: Ministry of Agriculture and Rural Development (2000).

Note: USD 1 = VND 15,965 (06 May 2006).

State of forests

The Global Forest Resources Assessment 2005 recorded that Viet Nam had 12.931 million ha of forest cover, or 39.7% of land area, and 2.259 million ha of other wooded land (FAO 2005, 191). In contrast, in 1943 it was estimated that Viet Nam had 14.3 million ha of natural forests that covered 43% of the country (Table 2). Table 2 indicates that by 1995 Viet Nam had lost 42% of its forest, while many of the remaining tracts were severely degraded. From 1973–1985, forest cover declined annually by 300,000 ha (3%/year) (Sikor 1998). This decline was reversed with total forest cover increasing by 2%/year from 2000–2005 (FAO 2005, 197).

Table 2: Change of forest coverage, 1943-2000

YEAR	NATURAL FORESTS (1,000 HA)	PLANTATION FORESTS (1,000 HA)	TOTAL FORESTED AREA (1,000 HA)	FOREST COVER (%)
1943	14,300	0	14,300	43
1976	11,077	92	11,169	33
1990	8,430	745	9,175	27
1995	8,252	1,050	9,302	28
2000	9,865	1,919	11,784	35
2003	10,005	2,090	12,095	36

Source: Nguyen Van Dang (2001); Department of Forest Protection (2004).

By the end of the 1980s the Ministry of Forestry had classified 10 million of the 19 million hectares of designated forestland as "barren" (Sikor 1998). Sikor (1998) also points out that forestry was recognised as in a state of crisis under Viet Nam's Tropical Forestry Action Plan, which concluded that "the natural forest resources of Viet Nam are not able to produce the logs needed by the wood-processing industry in a sustainable fashion even if managed properly."

The causes of deforestation are manifold and complex. In particular, pressure to convert natural forests to agricultural land for crops, including coffee, pepper and rubber tree, has grown in recent years due to spontaneous migration from the provinces in the north to the central highlands. The following reasons for the degradation of natural forests were identified at a workshop organised by the Ministry of Agriculture and Rural Development (MARD) in 2005:

- lack of social awareness of forest resources and their socio-economic and environmental functions;
- conversion of forestland for agriculture, aquaculture, salt production, etc.;
- over-exploitation of forests for timber and fuelwood;
- increasing population, shifting cultivation and movement of settlements by ethnic minorities;
- the use of "Agent Orange" by US forces that damaged about 2 million ha of natural forests, and;
- forest fires in semi-drought areas, especially semi-deciduous dipterocarp forests, bamboo forests, pine forests and melaleuca forests.

Evidence that Viet Nam's forests are still being degraded can be seen in the decline in growing stock, which averaged -0.40 m^3/ha/year from 2000-2005 (FAO 2005, 251). The removal of wood products - industrial wood and fuelwood - declined from 35.5 million m^3 in 1990 to 23.7 million m^3 in 2005 (FAO 2005, 281). In 2001, the FAO reported that 100,000 ha of forest were still being lost every year (Durst et al. 2001), thereby undermining their productive function. Table 3 indicates that Viet Nam is increasingly relying on imports for its wood needs because of the depletion of natural forest resources, its high rate of economic growth and the demands created by an expanding population.

The protection role of natural forests has been compromised, especially in moderating flooding during the rainy season and leading to an increase in underground flows in the dry season. The consequences for biodiversity are evident in the fact that, according to the IUCN red list, of the 800 native tree species twenty-five are considered critically endangered, thirty-six endangered and eighty-five vulnerable (FAO 2005, 275). Animals that range over a large area have been particularly affected. Habitat loss has resulted in human-wildlife conflict, such as elephants attacking people and destroying crops.

The government has put in place strong measures to rehabilitate and protect natural forests. These include the creation of national parks and reserves, investment in plantation, regeneration and afforestation programmes, the contracting of forestland to individuals, preferential interest rates for forest protection and the imposition of a ban on the export of logs and lumber in 1991.

Table 3: Imports of selected wood items

ITEM	YEAR				
	2000	2001	2002	2003	2004
Pulp for paper (metric tonnes)	46,500	84,500	33,200	33,200	104,835
Sawnwood (cubic metres)	100,500	133,200	207,400	207,400	426,615
Fibreboard (cubic metres)	20,000	29,920	91,900	91,900	158,411
Roundwood (cubic metres)	8,100	36,100	54,300	54,300	236,324

Source: FAOSTAT data, 2006.

Under Decision 1171-QD issued in 1986, the forests in Viet Nam were categorised into three types: 1) protection forest (watershed forests, moving sand protection forests, wave-break and coastal erosion protection forests); 2) special use forest (national parks and nature reserves), and; 3) production forest. In 2005, 39.8% of forests were designated for production, 45.5% for protection and 14.7% for conservation (FAO 2005, 209). The total area of protection forests is estimated at six million hectares, while the 120 special use forests, which include twenty-five national parks, cover more than two million hectares.

The special use forests play an important role in conservation, but a major challenge is to find ways in which people living within them who have depended heavily on forest resources for their livelihoods can contribute to forest protection. This is not a simple issue in mountainous and poor areas, leading some people to question whether Viet Nam can afford to have such a large area of national parks, nature reserves and protection forests.

The state also made forest plantations a central component of its national forest policy. The Five Million Hectare Reforestation Programme (also referred to as the 661 Programme) was launched in 1998 with the aim of increasing forest cover to 43% by 2010. The area of forest plantations increased rapidly after 1995 to exceed two million ha by 2003 (Table 2). From 1990–2005, on average over 100,000 ha of new plantations were established each year (FAO 2005, 239). In 2005, plantations accounted for 20.8% of the total forest area (ibid.).

The production plantation forests consist mainly of three exotic species: pines, acacias and eucalyptus. The productivity of plantation forests is improving and acacias and eucalyptus are able to reach growth rates of 15-20m^3/ha/year, and even 30-40m^3/ha/year in some areas. Nevertheless, the government acknowledges that, overall, production plantations still suffer from low quality (Nguyen Tuong Van and Williams 2006). Moreover, the government accepts that despite its efforts,

> *the quality of Vietnam's natural forests and biodiversity continue to be degraded, due to the growing human population and demands for forest resources, changes in land use, over-exploitation, illegal logging and poaching, and slash and burn agriculture. As the demand for forests products–and thus their market prices–continues to increase, especially to meet export demands, illegal logging has been increasing (Nguyen Tuong Van and Williams 2006).*

History of forest management and conservation

Viet Nam has a long history of forest management and conservation. This section focuses on the more recent history of forest administration, dividing this into two periods (1975-1986 and 1986-present). To place this discussion within a broader historical context, forest management prior to the Second Indochina War is first briefly described.

In the pre-colonial era forests provided important resources to the ethnic minority communities and were managed by traditional community institutions (Poffenberger 1998). Even during the colonial period, the French colonial government had little effective control over the forests. Nguyen Van Thang (1995) recorded that "the ownership of forests and forest land remained in the hands of the rural communities who controlled their use by customary law. Boundaries were elaborately defined by these communities, with some lands available for cultivation and others for preservation as forests."

This situation changed markedly after independence when the government nationalised large areas of land, which included natural forests. The first public agency responsible for forest manage-

ment and development was the Department of Forestry located within the Ministry of Agriculture, which later became the General Department of Forestry that was directly managed by the Government Council. The government established state forest enterprises to manage industrial timber production and set up provincial, district and commune-level government offices to administer other public forestlands. New social organisations, such as the farmer's associations, Women's Union and youth brigades, replaced the traditional institutions of the minority ethnic groups. The emphasis was on logging to generate revenue and to clear land for cultivation. Forest policy was direct towards serving as "a basis for the development of agriculture" (Ministry of Forestry 1991).

In 1968, the Department of Fixed Cultivation and Sedentarisation was set up in order to end swidden agriculture and resettle the upland ethnic minorities. A number of national parks and nature reserves were also established for the management and protection of important ecosystems.

1975 – 1986 period

After the Second Indochina War forest management continued in a similar fashion to the early post-independence period, being characterised by central planning and subsidised mechanisms. The state was directly involved in the management, exploitation, processing and distribution of forest resources. By 1989, there were 413 state forest enterprises: the Ministry of Forestry administered 76, provincial authorities 199 and district authorities 138 (Nguyen Van Dang, 2001). Smaller SFEs were governed by the provincial authorities and district governments.

A forest management system was established that reached from the central to the local level. At the central level the General Department of Forestry was renamed the Ministry of Forestry in 1976. The Ministry of Forestry was responsible for overseeing forest operations and providing technical expertise. The sub-departments of forestry and forest protection were created at the provincial level. Both sub-departments were tasked with managing and protecting forests, including dealing with infringements in logging and the illegal trade of wildlife.

The Ministry of Forestry was responsible for the technical supervision of the operations of the SFEs, for providing technical advice and for approving the applications for annual cuts. It prescribed uniform procedures for forest management for the entire country and provided precise silviculture regulations. The ministry also undertook the following programmes: the Forest Protection Programme, Fixed Cultivation and Sedentarisation Programme, National Afforestation Programme, Forest Management and Forest Industries Programme and the Human Resources Development Programme. Of these, Sikor (1998) described the Fixed Cultivation and Sedentarisation Programme as the "cornerstone of the forest development strategy." Under this programme, the government provided housing, some infrastructure and, when necessary, short-term food supply, with the intention of halting swidden agriculture and encouraging permanent settlement amongst the ethnic minorities. The households that took part in the programme were provided with tax exemptions and various subsidies to help them establish sedentary agricultural systems.

During this period the state was successful in managing forests to meet domestic demands for fuelwood and timber. The harvesting of the natural forests reached a peak during 1976-1980 when volumes averaged 1.7 million m^3/year (Nguyen Van Dang 2001), the surplus of which was exported. The harvesting volume declined in the period 1981–1985, but remained high averaging 1.3–1.4 million m^3/year (ibid.). The state invested heavily in afforestation, planting 3.6 billion scattered trees and 1.4 million ha of concentrated forest from 1961–1985 (Sikor 1998).

However, this planting was not sufficient to compensate for the loss of natural forests that averaged 300,000 ha/year from 1973–1985 (ibid). After the Second Indochina War, the state placed emphasis on increasing industrial production from forests and serving agricultural needs. An act on forest

protection in 1975 introduced regulations regarding exploitation, replanting and protection. According to Gilmour, Nguyen Van San and Xiong Tsechalicha (2000), "this resulted in severe over-exploitation of the forests, because production quotas were set based on state needs rather than the productive capacity of the forests." Sikor (1998) described the following five causes underlying forest loss and degradation:

- conflicts between local people and SFEs over control of forest resources and land;
- external demands for forest resources and land;
- lack of investment funds;
- limited capacity of the forestry sector to innovate, and;
- co-ordination problems between different levels of the forest administration.

After 1986

In 1986, the Doi Moi policy was introduced in order to orient Viet Nam towards the development of a market economy. Different economic sectors, including forestry, had to change their management and administration in accordance with the new policy direction. The policy shift in forestry was particularly radical as by this stage "Vietnam's forestry sector was in a crisis" (Sikor 1998). Fuelwood demands could no longer be met in some areas and forestry revenues were declining (ibid.).

In the early 1990s FAO supported an in-depth review of the forest sector that resulted in the creation of the National Forestry Action Plan. The key policy directions of the plan included further decentralisation and people's participation; the restructuring of forest-related institutions to improve support for local initiatives; environmental protection, and; improving the living conditions of the rural population.

Forest policy shifted away from management by the state towards greater participation in management by rural households. Sikor (1998) described this as a transition from "state forestry" to "household forestry." Nguyen Van Dang (2001) observed that the following four major orientations were introduced to develop the forestry sector:

- shifting the forestry sector from its primary function of exploiting natural forest resources to one of multiple functions, with the major tasks of protecting and establishing forest resources and improving the production of forest products;
- shifting forestry from a sector with only the state and the collective being eligible for forest allocation and forest-related enterprises to one of social forestry involving many economic actors in forest protection and development;
- shifting forestry from a sector mainly harvesting timber from natural forest to dealing in a variety of products and utilising plantation timber, and;
- building a forest sector using intensive cultivation and technological innovations and local and international expertise.

These basic orientations were operationalised through forestry legislation and regulations that aimed to give people a leading role in managing and protecting forest resources.

The Law on Forest Protection and Development was promulgated in 1991 and revised in 2004. The law states that the government uniformly manages forest and forestland. Under the law the state allocates forest and forestland to organisations and individuals (referred to as forest owners) for stable and long-term protection, development and utilisation in accordance with state planning. The law also prescribes the division of forests into the three types described above.

The Land Law was passed in 1993 and was revised in 1998, 2000 and 2003. This law states that land is the ownership of all people and that the state is the representative of all the owners. The state grants land-use rights through land allocation and land lease, recognises land use by present users, and stipulates the rights and obligations of the land users. The state manages land resources uniformly.

Based on the Law on Forest Protection and Development (1991) and the Land Law (1993), and their subsequent revisions, the government issued the following decrees and decisions:

- Decree 01-CP (1995) to issue regulations on allocation and contracts of land for agriculture, forestry and aquaculture production to state-run enterprises;
- Decree 163-CP (1999) regarding allocation of forestland to organisations, households, and individuals for stable, long-term forestry purposes;
- Prime Ministerial Decision 08/2001-QD-TTg (2001) on issuing regulations for the management of special use forests, protection forests, production forests and natural forests, and;
- Prime Ministerial Decision 178/2001-QD-TTg (2001) on benefit sharing and the obligations of households/individuals to whom the forest and forestland have been allocated, leased or contracted.

After revising the Land Law, the Law on Forest Protection and Development also needed revision. The latest revised law was promulgated to identify the forest and forestland use rights of different stakeholders and was adopted by the National Assembly in December 2004. Under the revised law the government continues to allocate and lease forests and forestlands to individuals and households for long-term use. Heads of the villages to which the state allocates forest and forestland represent villages. The rights of local communities to be allocated forest and forestland are also referred to in the revised law.

The forest governance process of Viet Nam can be understood with reference to the implementation of the forests and forestland allocation policy. The land and forest allocation policy was first formulated in the early period described above. In 1982, the Council of Ministers - now the government - issued a decision to accelerate land and forest allocation to collectives and people for plantation forests and to rehabilitate forests. The initial focus was placed on barren land and degraded forests for the establishment of forest plantations. This required that the state forest enterprises and agriculture industry unions collaborated in forest plantation and rehabilitation. Table 4 shows that natural forests and forest plantations have been allocated to all categories of stakeholders, including state organisations, individual households and people's organisations.

Table 4: Forest allocation to different forest owners

FORESTS OWNERS	FOREST CATEGORY	
	NATURAL FORESTS (HA)	PLANTATION FORESTS (HA)
State-owned enterprises	2,816,546	577,506
Management boards of protection forests	874,679	193,892
Management boards of special-use forests	1,268,091	69,944
Joint-venture companies	3,952	21,695
Households, collectives	2,007,850	731,067
Armed forces	58,730	36,875
Local People's committees	187,052	42,150
Others	2,305,576	172,196
Total area	9,865,020	1,919,569

Source: Statistical data of Department of Forest Protection, MARD (2002)

Current state of forest governance

The amended Law on Forest Protection and Development (2004) and Prime Ministerial Decision No. 245 (1998) describe the roles and responsibilities of different actors at different levels in the governance of forests and forestlands as follows:

National level

- The government has the authority and responsibility to manage forests uniformly.
- The Ministry of Agriculture and Rural Development (MARD) is responsible to the government for managing the forests.
- All decisions, policies, and revisions of the Law on Forest Development and Protection are initiated and drafted by MARD and commented on by related ministries, particularly the Ministry of Natural Resources and Environment, the Ministry of Finance, the Ministry of Planning and Investment and the Ministry of Culture and Information, and the Government Office. Major policies and institutions are approved by the prime minister, and other policies directly related to the sector are issued by the minister or by ministries.
- There are two departments in MARD that are dedicated to forestry issues, namely the Department of Forestry and the Department of Forest Protection.
- The Minister has delegated to the Department of Forestry the responsibilities of managing forest plantations, forest resource development and forest product harvesting, within the management scope of the Ministry.
- The Department of Forest Protection is responsible for forest resource protection, law enforcement and forest product management.
- The Ministry of Natural Resources and Environment is involved directly in forest management with respect to land administration.
- The Ministry of Defence and the Ministry of Police are responsible for directing their subordinates to collaborate with forest rangers to control illegal logging and to protect against and control forest fires.

Provincial level

- MARD has direct links with the provinces through the provincial Departments of Agriculture and Rural Development, including the sub-departments of forestry and forest protection. The Department of Forestry links with the sub-departments of forestry at the provincial level, which are under the provincial departments of agriculture and rural development. The Department of Forest Protection links with the sub-departments of forest protection at the provincial level, which are under the local people's committees.
- The chairpersons of the provincial people's committees are responsible to the government for the development and utilisation of forests and forestland in their respective localities.
- The departments of agriculture and rural development assist the provincial people's committees to fulfil the responsibility of forest governance.
- The provincial sub-departments of forest protection are responsible for supervising law enforcement with respect to forest management, protection and development within their respective provinces.
- The provincial departments of natural resources and environment assist the provincial people's committees to govern forestland.

District level

- The chairperson of the district people's committees is responsible to the chairperson of the respective provincial people's committee for the development and utilisation of forests and forestland in the district.

- The district station of forest protection is responsible for supervising law enforcement regarding forest management, protection and development in the district.
- The district division of land administration assists the district people's committee to manage forests.

Commune level

- The chairperson of the commune people's committee—wards and towns of districts—is responsible to the chairperson of the respective district people's committee for forest protection and development, and forestland utilisation in the area of the commune.
- People's committees at all levels are responsible for forest governance in the respective localities according to their competence.

Figure 1 is a schematic of the functions and tasks of actors at different administrative levels and their relationships.

The national forest management system has enabled and provided opportunities for local management authorities to be pro-active in undertaking forest management activities in their respective areas. This management system provides the legal basis, policies, and institutions for the local authorities to exercise and apply forest management in a manner appropriate to local conditions. The experience of the local authorities in forest

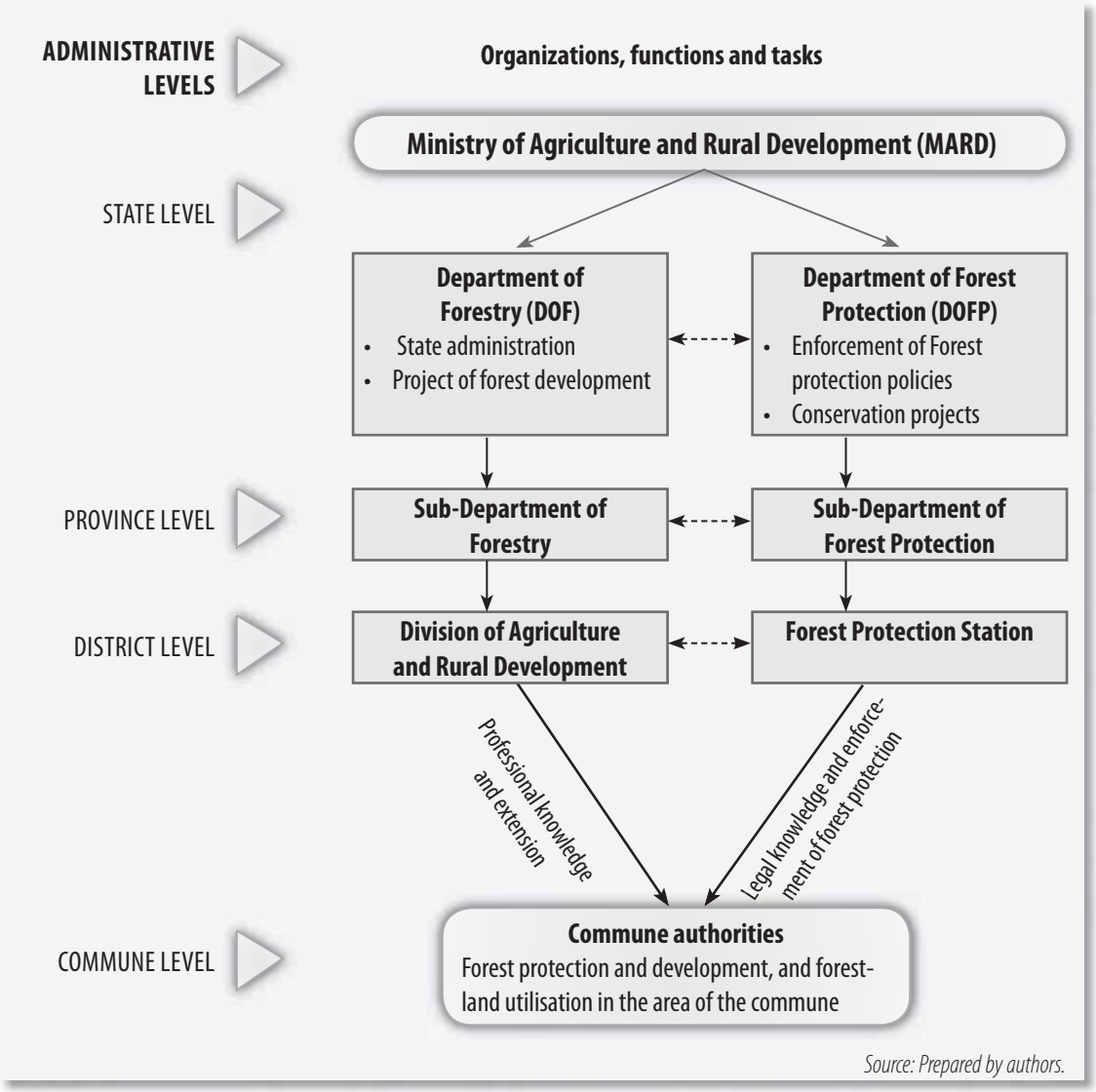

Figure 1: Forest administrative levels and the functions and tasks of actors in forest management

management can be fed back to the higher level institutions to improve policies and create a better enabling environment. Despite these major advances, the present forest management system contains some shortcomings. The strengths and weaknesses can be summarised as follows:

Strengths

- The management system at the central level has direct hierarchical relations that extend down to the management system at the local level. These relations have improved the efficiency and effectiveness of the system.
- The relations within MARD facilitate the coordination of activities, the creation of effective institutions and the formulation of policies.
- Direct relations with other ministries make the system more efficient and effective because forest management affects not just forestry, but also the economic, social, environment, security and defence sectors.

Weaknesses

- In practice, co-ordination between institutions at different levels of the hierarchy is still loose. Even within MARD, the departments specialising in forestry and the other departments tend to work independently.
- The management capacity of the two main forestry departments within MARD was reduced. Human resources are not sufficient to address the practical demands of forest management in a country where three-fourths of the land area is mountainous and covered with forests.
- The relationship between MARD and other ministries with respect to responsibilities has not been addressed adequately, in particular with the Ministry of Natural Resources and Environment, regarding the governance of forest resources, biodiversity and the environment.

Decentralisation in forest management

The decentralisation of forest management received more attention after 1986 with substantial changes being implemented later in the 1990s. Prime Ministerial Decision No. 245/1998/QD-TTg clearly defined the responsibility of the people's committees regarding forest governance at their respective levels—provincial, district and commune. The decision also specified the relations between related ministries and agencies at the central and local levels.

Formally, the national park management boards were under the jurisdiction of MARD. Most of these boards were shifted to the administration of the local authorities. Only eight of the twenty-five national parks remain under central management. The protection forest management boards were also shifted to the administration of the local authorities. Small, special-use forests of less than 1,000 ha do not have management boards. They are allocated to people's organisations at the commune level, households and individuals for management. Smaller protection forests of less than 5,000 ha were likewise allocated to the people's committees or people's organisations at the commune level, households and individuals.

The government has endeavoured to separate the state management of forests from business. Previously, forests that provided raw material for paper were managed under the former Ministry of Forestry (presently MARD). The management of these forests was transferred to the Paper Corporation of the Ministry of Industry. This has allowed a better integration of forest management with the demands of industry.

Decentralisation has provided greater space for self-governance. The provinces can propose plans for forests and forestland to MARD for adoption, they can be responsible for managing these plans and they can propose appropriate management policies in their respective provinces. Districts and com-

munes also have autonomy in forestry management activities, as is illustrated in the following examples:

- The management of mangrove forests, which are complex ecosystems, is challenging. In Viet Nam, mangrove forests are located mainly in the Mekong River Delta provinces. The provinces have issued decisions on mangrove forest management regarding land allocation and forest tenure, and the rights and obligations of households, individuals and state forest enterprises that hold tenure of mangrove forests and forestland. These regulations are specific to the provinces and are applied within their boundaries.
- Many provinces are proactive in implementing community-based forest management models, especially for protection forests (e.g., Lai Chau, Son La, Hoa Binh, Dac Lac, Gia Lai and Thua Thien Hue). Since 2000 local communes are encouraged to formulate local village conventions on forest protection, which are recognised by the sub-department or station of forest protection. In Lai Chau province, 1,791 villages of 145 communes have conventions, and Son La and Hoa Binh provinces have 339 and 1,566 conventions, respectively. These conventions are formulated according to customs and traditions of managing and protecting forests, and are amended and developed to respond to the requirements of the present period. The management models have proved effective, are well-recognised and are applied widely. The models have not only strengthened the role of the community in forest management and protection, but also that of women (e.g., in Son La province).

Decentralisation of forest protection management

The decentralisation of state forest administration is mentioned for all three types of forest in key forestry policy statements. Here we describe these policies for protection forests to illustrate the extent of decentralisation.

At the district level, the protection forest management board is responsible for managing protection forests to ensure targets regarding sustainability and biodiversiy are achieved in accordance with prevailing policies and regulations. Annually, the board submits an action plan to the district people's committee for approval. After receiving financing from the state budget, e.g., through the Five Million Hectares Reforestation Programme, the board co-ordinates with the people's committees at various levels and the relevant local authorities to outsource/contract work to people's organisations, households and individuals to implement the action plan. The board is allowed to organise business activities such as growing agricultural, fruit and industrial trees and eco-tourism. Through the implementation of the annual action plan the board collects opinions from the contracted households and individuals to inform the subsequent year's action plan. Boards do not manage protection forest of less than 5,000 hectares. These are funded through the provincial budget. However, the decision-making process for investment still follows a bottom-up approach.

The forest management board plays an important role in aggregating and defining the priority issues in the planning process and in organising the execution of the approved action plans (Figure 2). Monitoring and evaluation are undertaken annually by the sub-department of forestry to review the implementation of the plans, the usage of investment capital and the performance of the contractors.

The roles and responsibilities of contractors at the commune level and the benefits they are entitled to receive are described in Table 5.

The roles and responsibilities of people's organisations are established during the process of developing village regulations at the village level. Through this mechanism the traditional values of local people have contributed to the performance of the prevailing state policies and regulations for the protection forest system. Conversely, participatory forest management allows the local communities to develop village regulations appropriate to their specific circumstances through the following process. First, local people can share their opinions on the general objectives/targets to be achieved in the statement of

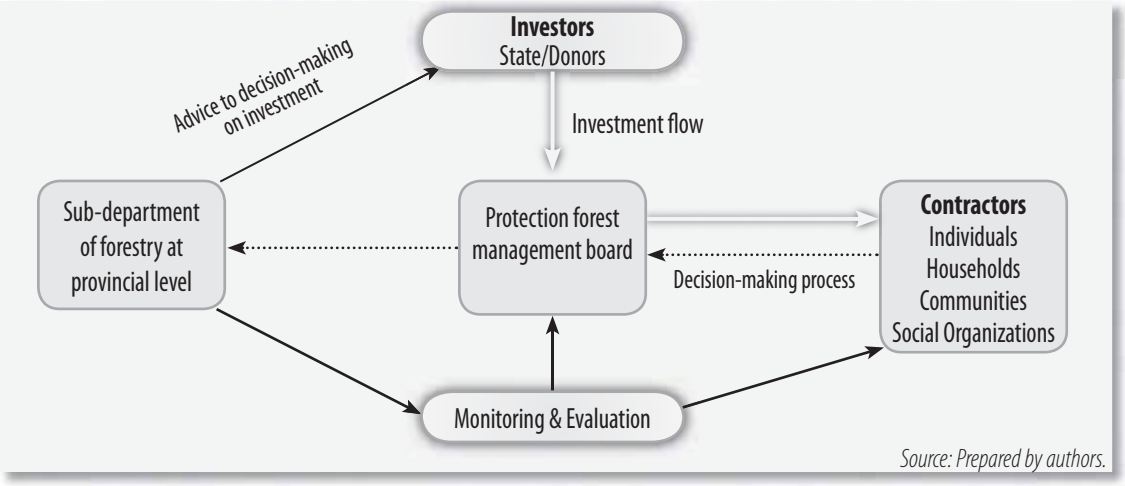

Figure 2: Investment, monitoring and evaluation mechanisms and decision-making processes for investment in protection forests

village regulations. Second, they can discuss the detailed issues raised in the statement of village regulations including: a) how forestland plots will be allotted to households in accordance with specific targets, b) benefits and penalties, and c) regulations on hunting, the exploitation of non-timber forest products and forest area for grazing. Third, once the village regulation statement receives the acquiescence of the whole community, the village chief presents it to the communal authorities, who in turn present it to the district authorities for approval.

At the village level local people are responsible for ensuring that the village regulations are complied

Table 5: Local stakeholder participation in forest management at commune level

ACTORS	ROLES/RESPONSIBILITIES IN FOREST MANAGEMENT AND UTILISATION	BENEFITS RECEIVED
Village leaders (Village chief and members)	Establish the village forest protection team, participate in patrolling and deal with minor violations. Organise activities in accordance with guidelines and regulations on forest management and protection.	Receive financial support from outsourced or contracted activities for forest planting and protection.
Women's Union	Raise awareness and encourage family members to give greater consideration to forest protection.	Receive financial support from outsourced or contracted activities, if undertaking any contracts.
Youth Union	Raise awareness (are a key driving force for forest protection).	None
Union of Elderly People	Raise awareness and disseminate information on forest management and protection.	None
Veterans Association	Disseminate information and encourage villagers to undertake forest management and protection.	Receive financial support from outsourced or contracted activities, if undertaking any contracts.
Farmers' Union	Disseminate information on forest management and protection.	None
Households	Forest planting, care and protection.	Receive payment for undertaking contracts for forest planting, care and protection.

Source: Prepared by authors.

with and implemented. Their responsibilities and rights will be established and the penalties and fines for violations will be set. The village regulation statement has not only regulated obligations for forest resource protection, but has also returned to local people the opportunity to benefit from timber and non-timber forest products.

Various state level legal documents concern the establishment of protection forests by households and people's organisations. For example, under the 661 programme contractors (including households and social organisations) manage the protection forests and are entitled to an allowance of VND 50,000/ha/year for up to five years. An allowance of VND 1,000,000/ha/year can be provided for six years under contracts for regeneration forests with supplemental planting.

Decision No. 08/2001/QD-TTg, dated 11 January 2001, concerns the issuance of management regulations for special-use, protection and production forests. Under these regulations, the entitlements of the contractors are divided according to protection and production forests as follows:

- **Protection forest**
  - An allowance for protecting natural regeneration and new forest planting in accordance with the performance of the contracts.
  - Contractors can collect firewood and non-timber forest products in protection forests.
  - With respect to the activities of assisted natural regeneration with supplemental planting, contractors can benefit by thinly trimming the forests and collecting non-timber forest products.
  - The opportunity to expand the period of the contract exists.

- **Production forest**
  - Local people can be entitled to all agricultural and forest products when the forests are ready for harvesting.

The extraction volumes for timber and non-timber forest products can be divided as follows:

- **Natural forests**
  - When forest cover is more than 80% of the allocated area, contractors can only harvest bamboo, with a maximum extraction rate of up to 30%. Contractors are entitled to the total value of the forest products after paying taxes, levies and other fees to local authorities.
  - Except for timber species and non-timber forest products listed in the "Red Book," contractors are allowed to harvest timber using selective felling, with the volume not exceeding more than 20% of forest cover.

- **Plantation forests**
  - For plantation forests that are financed from the state budget, contractors are allowed to exploit the forests by thinly trimming with a volume of no more than 20% of the potential exploitation volume. They must ensure that the forest cover exceeds 60% after harvesting. Once the forest has matured, the contractors are allowed to extract a volume of no more than 20%, or they are allowed to fell in patches or strips of no more than one hectare for protection areas and no more than 0.5 hectare for highly critical protection areas. The total annual harvesting must not exceed 10% of the grown area.
  - For privately funded plantation forests, after the forest has matured the contractors are allowed to exploit up to 10% of the total invested annually, and are allowed to fell in patches or strips of no more than two hectares in size in protection areas and no more than one hectare in size in highly critical areas.
  - After harvesting, the contractors must implement a plan to replant the forests in the consecutive growing season and continue to manage and protect the forests.
  - According to Decision No. 178/2001/QD-TTg and Inter-Ministerial Circular No. 80/2003/TTLT-BNN-BTC, the contractors are entitled to the total value of proceeds from timber sale at delivery yards minus natural resource taxes and the amount payable for outsourcing.

The above-mentioned are the main policies related to investment, the extraction volumes and mechanisms to share and distribute forest products. In reality, however, the distribution of forest products between contractors, outsourcing employers and the state through the collection of the natural resource tax is flexible and varies according to local circumstances. The most important principle is that the contractor can be entitled to 70-85% of the total extracted products.

The framework of policies for protection forests provides for organisational models to identify not only benefit-sharing arrangements, but also the roles and responsibilities of forest stakeholders. The strength of this framework of policies is that it provides precise information as to whom the forest and forestland has been allocated or contracted. However, defining forest reserves is extremely difficult, because, *inter alia*, natural forest contains many tree species with different distribution patterns; hence, it is a necessary challenge to define a suitable protection forest management system to ensure maximum long-term benefits for contractors.

CASE STUDY

The changing face of forest governance in Phu Loc district, Thua Thien Hue province

This section examines the changes in forest governance in Phu Loc district, Thua Thien Hue province (Figure 3) with respect to the changes in economy, politics and the forest management policies of Viet Nam. Phu Loc district covers a total area of 72,323 hectares. It is the home of the Bru Van Kieu ethnic group, which has long based its livelihood on upland farming. For the local people, forests supplied important necessities, such as firewood, food and construction materials. Some forests played a significant role in local spiritual life. However, since colonial times the people and forests in this area have experienced contradictory changes in policies and forest management mechanisms.

In the early twentieth century, primary forests containing diverse and valuable fauna and flora covered most of the area. The state applied a system of strict management to Phu Loc forests when it set aside 50,000 ha of forest around Hai Van pass

Figure 3: Map of Thua Thien Hue province

as a national park, which was nationalised in 1925. Although the national park was established to protect pheasants (*Lophura Edwarsi*), this area had a number of villas and luxurious hotels for the French colonialists. The interests of the colonists had replaced local interests in forest management.

The South Vietnamese government (1954-1975) changed the national park into the Bach Ma - Hai Van national forest garden. The garden was extended to around 78,000 ha for the purposes of visiting and entertainment. However, investment in the garden was affected by conflict between the South Vietnamese Liberation Army and the South Vietnamese government. Moreover, the South Vietnamese government forced local people living in remote and forested areas to move to the lowland areas, with the intention of separating the local people from the revolutionary forces. Additionally, the South Vietnamese government with the support of the US army bombed and used the dioxin-laced defoliant Agent Orange in the forested areas to destroy the guerrillas and revolutionary forces. The people, forests and the environment of the area still suffer severely from the impacts of Agent Orange.

After 1975, the socialist state implemented a new forest management system in Phu Loc district. Two state organisations were established to manage the forests: the management board of the Bach Ma nature reserve and the Phu Loc state forest enterprise. The management board is responsible for managing the nature reserve areas in accordance with ecological and scientific objectives, whereas the Phu Loc SFE is an economic unit aiming to provide timber and forest products for economic development.

This management system ignored traditional management practices based on community regulations. Ownership and authority over forests and forestland was taken over by the state through its representation in the district. From 1975-1986 one thousand hectares of primary forest were harvested to provide timber and forest products. This not only destroyed the natural resource base and diminished biodiversity, but also deprived the local people of benefits from the forest and undermined the value attributed to local knowledge and culture. Consequently, many farmers resorted to harvesting commercial timber and cleared forest for upland farming.

Forest management policies started to change significantly in 1986 with the introduction of *Doi Moi*. *Doi Moi* facilitated a shifting from centralised and subsidised forest management towards the involvement of different economic entities. Illustrating the decentralisation process described earlier, after the forests were gazetted as production forest, special-use forest or protection forest, part of the forests and forestland was allocated or contracted to communities, households and individuals. These, together with the protection forest management boards, became the new forest owners.

According to the Phu Loc district forest protection station, 11,760 ha of forest and forestland were allocated to communities, households and individuals (Table 6). The households of ethnic minorities were prioritised for contracts and allocation for forest and forestland in the district.

Table 6: Forest and forest land classified according to management entities

			AREA (HA)	AREAS CLASSIFIED ACCORDING TO MANAGEMENT ENTITIES			
				NORTH HAI VAN MANAGEMENT BOARD (HA)	BACH MA NATIONAL PARK (HA)	PHU LOC SFE (HA)	HOUSEHOLDS, INDIVIDUALS AND COMMUNITIES (HA)
Forest land	Forested area	Natural forest	17,724	8,622	5,429	1,876	1,796
		Plantation forest	13,099	3,601	99	3,074	6,326
	Bare land		8,606	1,901	1,916	1,153	3,636
Other type lands			32,894	4,018	366	731	27,779
Total area			72,323	18,142	7,809	6,835	39,537

Source: Report for the review of the model of allocation of natural forest to village communities in Phu Loc, Phu Loc Forest Protection Station (2004).

The implementation of the new forestry policy in the district stimulated forestry activities. After applying the system of forest and forestland contracts and allocation in 1994, within five years one thousand hectares of bare land in the district were planted in fruit trees and industrial species. An even greater area was designated under critical protection or special use forests, providing not only environmental and ecological benefits, but also providing farmers with income from forest products.

However, a number of deficiencies can be found in this system. First, the forest and forestland contract and allocation system only created momentum in areas that were easy to farm and to sell products (Le Quang Trung 2000; Do Dinh Sam and Le Quang Trung 2003). Second, most of the contracted and allocated areas are bare land, and most people are not capable of undertaking large, long-term investments. Third, some households have contracts for poor quality forest areas. Fourth, households with contracts for protection forest and special use forest only receive VND 2.5 million/ha for plantation and tending, or VND 50,000/ha/year for forest protection. These amounts are too small to cover labour costs. Fifth, due to the constraints facing the state budget, only a small number of households can be allocated land and offered forest contracts. Sixth, state units such as the North Hai Van Management Board, Bach Ma National Park and Phu Loc SFE manage areas rich in forest, but they are not capable of protecting the forests against illegal loggers.

In late 2000, the issue of effective forest management in the Phu Loc district was discussed openly amongst the local people and local authorities at the district and provincial levels, together with international experts. These discussions originated from attempts to support decentralised forestry approaches in Viet Nam by various international organisations and donors. They facilitated a learning process at the national level to link the international dialogue on forests with Vietnamese policy-making processes and to link these processes with local realities, constraints and opportunities. Based on the support of international programmes, the Phu Loc Forest Protection Station organised discussion between the local authorities, the forest management units (North Hai Van Management Board, Bach Ma National Park and Phu Loc SFE) and some local communities. Community participation was promoted by providing incentives. The discussions indicated that the allocation of natural forest to local communities met the expectation of the locals and that there are opportunities to improve the efficiency of forest management. The Phu Loc Forest Protection Station and the North Hai Van Management Board advised local authorities to establish a new action plan for allocating natural forest to permanent resident local communities. A benefit-sharing mechanism was proposed (Table 7) that focused on achieving sustainable forest management by encouraging farmers to utilise non-timber forest products and develop eco-tourism. Previously, these activities were not encouraged as it was thought that they harm the protective function of forests. Three communities were selected for a pilot model: Thuy Yen Thuong-Loc Thuy Commune, Thuy Duong-Loc Tien Commune and Pu Hai II-Loc Vinh Commune.

Table 7: Benefit-sharing mechanism for communities allocated natural forest

Legal timber	• If the forest growth is more than 1.5 m^3/ha/year, the community can obtain 50% of the growth amount. • If the forest growth is more than 1 m^3/ha/year, the community can obtain 30% of the growth amount. • If the forest growth is more than 0.5 m^3/ha/year, the community can obtain 20% of the growth amount. • If the forest growth is less than 0.5 m^3/ha/year, the community can obtain 20% of the growth amount.
Broken, dead and fallen timber	100% for local people
Non-timber forest products	100% for local people
Other products	Farmers are entitled to exploit some natural resources such as soil or sand, or to conduct eco-tourism, providing that the activities are pursuant to current laws and regulations and do not reduce the forest's quality.

Source: Report by Phu Loc Forest Protection Station (2004).

Communities involved in the pilot model were requested to establish a plan and benefit-sharing arrangement, in accordance with the general legal framework and to self-organise their forest protection activities according to their plan. To achieve this, village regulations were established after discussion among community members on traditional customs and state laws and regulations.

For the past four years, 1,200 hectares of natural forest were allocated to the three communities. They are well protected and have an increased average timber growth of 1%/ha/year. Farms earned VND 600,000/ha/year from the collection of forest products. Illegal logging and forest encroachment for upland farming was stopped. All farmers participate actively in community forest protection. Moreover, farmers invested VND 870 million for the development of eco-tourism. During 2002 and 2003, more than 50,000 tourists of which 25% were foreign, visited the area (report by Phu Loc Forest Protection Station, 2004). The development of eco-tourism created jobs and income for the local people and revived the production of traditional bamboo handicrafts. More significantly, the success of the Phu Loc model has a positive impact on the policy of encouraging communities to contribute to forest management and protection. At the national level, the Working Group for Social Forestry was formed and the role of community forestry and regulations on community forest allocation were included in the revised Law on Forest Protection and Development enacted in 2004.

The history of forest management in Phu Loc district shows that ineffective forest management was the result of inequality inherent in forest management planning and policy. Over the duration of about 100 years, the forest management policy in Phu Loc district was characterised by: a) a focus on immediate benefits, b) power captured entirely by the state, and c) a failure to consider the rights of and benefits forests have for local communities. The difficulties for farmers under this management regime resulted in conflicts and their exclusion from forests. The forests would have been managed in a far more sustainable manner if opportunities had been created for farmers to choose suitable management forms that accord with their expectations, needs and customs.

The Phu Loc district experience described above proves the judiciousness of the government's decentralisation policy; the government changed its role from a direct forest manager to one of guidance and the more general control of forests. Forest policies were continuously improved to attract different actors/economic entities to involve themselves in forest management. The actors are entitled to select the forms of management, investment, harvesting and sales of forest products that fit within the general legal framework. Providing space for community forest management at the village level is especially important as it builds the solidarity of the community, optimises benefits for the community and develops the culture and community identity of people whose lives are linked to forests. In the Phu Loc district, collaborative relationships for forest management were constructed after the allocation of forestland. Many households took the initiative to invest their capital and labour in enterprises such as agroforestry, eco-tourism, the collection of non-timber forest products and forest plantations.

Nevertheless, the system of policies to encourage people's participation in sustainable forest management has the following limitations:

- For the large protection forests and special-use forests, the rights given to those allocated the forests remain limited by state policies.
- Most of the natural forests that are registered as production forests that contain valuable forest products are under the management of state forest enterprises. The economic efficiency of SFEs remains problematic.
- The land area allocated or contracted to the people represents only 25.1% total forest land.
- The system of allocation of natural forests to local communities in Phu Loc district represents one potential approach to sustainable forest management in Viet Nam. However, this trial model was not applied to other localities, even within Thua Thien Hue province.
- The state continues to emphasise its objectives in forest management, rather than considering the totality of interests, including those of the local people.

Policy recommendations

Important lessons can be drawn from the Phu Loc district case study and the broader analysis on forest governance in Viet Nam presented above. The following recommendations suggest ways in which Viet Nam can achieve sustainable forest management, with an emphasis on good forest governance.

1. Interactive (two-way) relationships within the forest management system should be established from the central to the local government level (province, district and commune) to ensure decision-makers are in touch with local realities.

2. A system should be established to ensure that at each level the management units co-ordinate their activities and avoid working in isolation.

3. Human factors in forest governance are very important. Forestry is, by nature, managed over a wide area and concerns a variety of disciplines: economic, social and environmental.

4. The capacity of the government staff should be enhanced and further staff should be employed, especially at the district and commune levels. Efforts are underway to increase the capacity of forest rangers and to provide them at communal levels in order that they can be in touch with local realities and close to forest sites.

5. Decentralisation should be accelerated within the domain of forest governance based on the expansion of stakeholders in forest management (households, individuals, groups of households and other social groups, e.g., Union of Elderly, Women's Union, Association of Veterans and schools).

Further expansion and strengthening of co-management-based communities is desirable as it is an efficient and sustainable model in appropriate settings. This possibility was established under the amended Law on Forest Protection and Development (2004) that recognises the modality of community-based forest management.

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8

FOREST MANAGEMENT IN THE PEOPLE'S REPUBLIC OF CHINA

Yuichiro Hirano (Part A)
Yoshiki Seki and Xiang Hu (Part B)

PART A: **Evolution and contemporary features of forest management**

Yuichiro Hirano[1]

Introduction

This chapter assesses forest management[2] in the People's Republic of China[3] in terms of the institutional and human relations involved. Its objectives are to identify problems facing sustainable forest management and to propose appropriate countermeasures. It assesses forest management from a historical perspective, describing how different strategies were employed at different periods in the political development of the People's Republic of China over the past fifty years. Forest management has been part of the political processes, partly explaining the turnarounds in national forestry policy that have been a feature of this history. The changes in forest management must be positioned in the broader context of socialism pursued by China's leaders.

This chapter traces how mass mobilisation has been used as a mechanism of state building and its implications for forest management. The top-down nature of forest management in China has been instrumental in the planting of millions of hectares of forests for environmental and economic purposes, but unfortunately the quality of the planted forests has been inferior. This study concludes with a discussion of how historical political processes have shaped contemporary forest management and the challenges that remain. Foremost among these are the need for the central government to support local, spontaneous forms of forest management and to find ways of instilling a sense of enthusiasm for forestation throughout the general population.

Features of China's forests and their broader context

China, which has a total land area of about one billion hectares and a population of more than 1.3 billion, has had an enormous effect on the economies and the environment in east Asia. Ninety-two per cent of its people belong to Han ethnicity, with the remaining eight per cent divided into fifty-five

1 Department of Advanced Social and International Studies, Graduate School of Arts and Sciences, University of Tokyo (hirano_yuichiro@yahoo.co.jp).

2 This phrase includes all activities concerning forest management prescription, such as forestation (afforestation, reforestation, regeneration and aftercare management), forest preservation from fire, illegal lumbering, diseases and pests. It also covers forest production activities, such as logging, processing, selling and deciding the property rights of forests.

3 Hereinafter referred to as "China" or abbreviated as "the PRC".

minority groups. Although the annual average GDP growth rates have been rising by eight – nine per cent in recent years, GDP per capita is only about USD 1000.

These aggregate measures cloak large regional imbalances. The majority of the population is densely distributed in the east and the middle parts of the country, in contrast to the west which is thinly populated because of its mountains, highlands and deserts. Han people live mostly in the populated regions, while the minority groups are more thinly scattered in the border areas. The policy of economic reform and opening up to the outside, especially in commerce and industry, has supported high average annual economic growth rates since the 1980s. As a result, China is now faced with serious internal economic disparities between the coastal region in the east and the urban areas that have benefited from the reform policy and the inland region or the rural areas.

These regional differences underlie the diverse relationships that exist between the people and the forests in China. A recent government report on forestry indicates that in 2003 the seven provinces of Zhejiang, Shandong, Fujian, Jiangsu, Hebei, Guangdong and Hunan each exceeded 30 billion yuan[4] in the gross product of the forest industry, representing more than half of the national forest product (State Forestry Administration 2004). Except for Hunan, where the forest industry has a long, vibrant history, the other six provinces are all located in the coastal regions. Here, the forestry industry has flourished based on capital imports and merchandise exports that were spurred by liberal economic policies. In 2002, fourteen provinces and autonomous regions recorded forest products (in the category of primary industry) each exceeding one per cent of the national gross product (Table 1). Of these, only three provinces, Fujian, Guangxi and Hainan, are located adjacent to the coast, while the rest are inland provinces. This geographical characteristic is explained by the fact that forests remain particularly important to local people living in rural areas that are relatively underdeveloped.

The distribution of forests between provinces is uneven. The forms of ownership and management of forests also differ from one area to another. The north-east, consisting of Liaoning, Jilin and Heilongjiang provinces, and the eastern part of Inner-Mongolia, have a large area of state-owned forestlands.[5] In the south-west, consisting of Sichuan and Yunnan provinces, the numerous forest blocks are mainly owned and managed by local governments. In contrast, in the vast region south of the Yangtze River (the "South Collective Forest Region") villages, townships and other collective units that function as the terminal administrative units own most of the forests. Forests exceed ten per cent of the land area in only a few provinces in the Yellow River basin, the north-west and Tibet.

Due to these regional differences, it is difficult to generalise about forest management in China. Nevertheless, forest management over the entire country is shaped by one common political process: under the regime of the Chinese Communist Party (CCP), state building and policy implementation along socialist principles were implemented over the entire country for more than fifty years. To appreciate how forests are managed at the local level and the relationships between communities and forests requires that both regional/local diversity and national policies and organisational structures be taken into account.

According to official statistics, in 1998 the national forest area of China was 158.94 million hectares (Table 2). In the PRC, the public ownership system of the means of production, including land, was established in the process of socialist state building. Since the late 1950s, the ownership of forestland has been confined to the state or to the collective bodies, namely, the basic administrative units of the townships and villages. As Table 2 shows, the total area of forests owned by the state was 63.89 million hectares (41.6% of the total) and the collective bodies owned the rest.

In 1998, forests covered 16.55 per cent of the total land area in China, well below the global average of 27 per cent. The per capita forest area was only 0.128

[4] USD 1 was approximately CNY (Chinese Yuan Renminbi) 8.1 in December 2005.

[5] In practice, both the central and local governments involve themselves in the management of the state-owned forestlands.

Table 1: Significance of forestry to GDP and percentage of land covered by forests in provinces, autonomous regions and municipalities of China

	A: GDP (CNY 100 million)	B: Gross Output Value of Forestry (CNY 100 million)	B/A×100 (%)	% of Land Covered by Forest (C)
Beijing	3,212.71	12.8	0.40	18.93
Tianjin	2,051.16	1.5	0.07	7.47
Hebei	6,122.53	37.5	0.61	18.08
Shanxi	2,017.54	24.9	1.23	11.72
Inner Mongolia	1,734.31	28.8	1.66	12.73
Liaoning	5,458.22	27.9	0.51	30.95
Jiling	2,246.12	14.3	0.64	37.43
Heilongjiang	3,882.16	16.2	0.42	38.72
Shanghai	5,408.76	7.7	0.14	3.66
Jiangsu	10,631.75	36.3	0.34	4.51
Zhejiang	7,796.00	74.5	0.96	50.80
Anhui	3,569.10	69.3	1.94	22.95
Fujian	4,682.01	84.2	1.80	60.52
Jiangxi	2,450.48	59.2	2.42	53.37
Shandong	10,552.06	48.3	0.46	12.58
Henan	6,168.73	60.5	0.98	12.52
Hubei	4,975.63	28.3	0.57	25.98
Hunan	4,340.94	54.8	1.26	38.90
Guangdong	11,769.73	57.1	0.49	45.81
Guangxi	2,455.36	39.8	1.62	34.37
Hainan	604.13	49.1	8.13	39.56
Chongqing	1,971.30	13.5	0.68	–*
Sichuan	4,875.12	54.6	1.12	23.50
Guizhou	1,185.04	18.2	1.54	20.81
Yunnan	2,232.32	53.5	2.40	33.64
Xizang	161.42	1.2	0.74	5.93
Shaanxi	2,035.96	26.6	1.31	28.74
Gansu	1,161.43	13.9	1.20	4.83
Qinghai	341.11	2.7	0.79	0.43
Ningxia	329.28	5.1	1.55	2.20
Xinjiang	1,598.28	11.1	0.69	1.08

Source: A and B - National Bureau of Statistics of China, http://www, stats.gov.cn/, 2002. C - the Department of Forest Resources Administration of the State Forestry Administration (2000).

Notes: ** A reason why no data was given for Chongqing province is that it may have been upgraded from a city to a province during the fifth National Forest Resources Investigation executed from 1994 to 1998.*

hectares, about one-fifth of the world average. A shortage of forest cover has existed throughout the PRC's history, preventing the fulfilment of its multiple functions. Frequent flooding, land degradation, desertification, aridity, disruption of the ecosystem and the shortage of timber and firewood are all caused by the inadequacy of forest cover. The people and the government of China recognise these problems in so far as repeatedly acknowledging that the situation is worsening in many localities. The central government has attempted to solve these problems (*The People's Daily* 1949 to 2004: Yi 2000), but the shortage of forests continues to haunt modern Chinese society.

Although present national forest cover is clearly inadequate, it has doubled from that of 1949. The national forestation programmes that were organised on a large scale by the government throughout the period of the PRC help explain this remarkable change. The high ratio of planted forests (the world's highest), the high ratio of protection forests, and the unusually high ratio of young and middle-aged forests (up to a ceiling of 30-60 years old) are proof that the state has displayed serious concern for the quality and the extent of forests (Table 3). Over the past fifty years, the total area of forestation has increased rapidly to reach more than 200 million hectares (Figure 1).

If the official figures are correct, China has forested a vast area. However, serious problems preventing this forestation from bringing substantial benefits have been reported. For instance, inadequate aftercare management kept the survival rate of the planted trees chronically low. Dafu (1998) found that from 1950 to 1988 only about 21 per cent of the planted trees had survived. Moreover, the annual statistics do not have definite standards for measuring forests and their survival rates. Occasionally, cadres of the local governments and units have reported inflated figures to maintain their political status by appearing to meet the targets set by the central government.

Despite these problems and doubts over the official figures, the PRC should be regarded as exceptional for its concern for planting forests over large areas. In modern world history that has seen the destruction of forests across the globe, no other region has increased the percentage of forest cover to this extent while implementing and planning future programmes to increase and preserve forests.

The demands for wood and timber increased in China, both under a socialist economy and from the 1980s onwards, a socialist market economy. The volume of national wood products increased remarkably until a decade ago (Figure 2). Sources for supply were sought in the decreasing number of

Table 2: Ownership features of forests in China (1998) - million ha

	NATURAL	PLANTED FORESTS	TOTAL FORESTS	SPECIAL AREAS*	TOTAL
State-owned	55.07	8.82	63.89 (41.60%)		
Collective	51.89	37.85	89.74 (58.40%)	5.31	158.94
Total	106.96 (69.10%)	46.67 (30.90%)	153.63 (100%)		

Source: Ma et al. (1996); Department of Forest Resources Administration of the State Forestry Administration (2000).

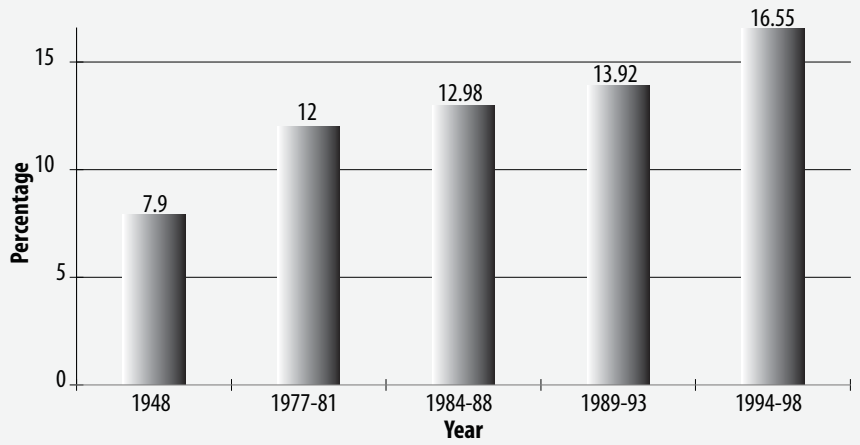
*Note: * In the Fifth National Forest Resources Investigation, the total area of forests consisted of forests and special areas that included some shrub land and non-stocked land.*

Table 3: Various categories of forest area of China (1998) - million ha**

TIMBER FOREST	PROTECTION FOREST	NON-WOOD FOREST	FIREWOOD FOREST	BAMBOO GROVE	SPECIAL PURPOSE FOREST
99.40	21.38	20.22	4.45	4.21	3.97
64.70%	13.92%	13.16%	2.90%	2.74%	2.58%

Source: Department of Forest Resources Administration of the State Forestry Administration (2000).

*Note: *"Protection forest" is an inclusive category of forests for natural disaster prevention and reducing degradation of the environment. It includes forests for providing windbreaks, reducing the movement of sand and the prevention of net soil outflow, forests for water and forests as shelterbelts around fields. "Non-wood forest" mainly consists of forests for oil and fruits. "Special purpose forest" is a category used for scientific studies or landscape conservation.*



Source: Zhongliang et al. (1996); Department of Forest Resources Administration of the State Forestry Administration (2000).

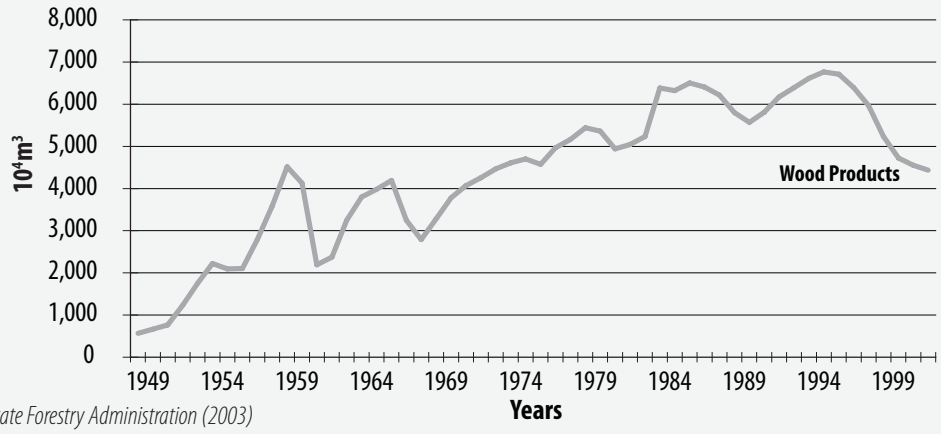
Note: The 1948 value is an estimate. Other values are from the second to fifth National Forest Resources Investigations. The State Forestry Administration recently published part of the results of the sixth National Forest Resources Investigations, which reported that this rate increased to 18.21% (The People's Daily 19 Jan. 2005).

Figure 1: Change in forest cover in the PRC (% of total land area)

fractional forests and the natural forests that were spreading in the north-east and south-west. The past fifty years of the PRC can be described as a period in which natural forests were cut and planted forests of inferior quality were established.

In 1998, more than 67 per cent of the natural forests were composed of young and middle-aged trees. In recent decades, many trees were cut down and the regeneration of the original forestlands was attempted. The CCP administration tried to control felling by issuing regulations regarding the amounts and methods of cutting. The huge floods that swept across the basins of the Yangtze and Songhua rivers in the summer of 1998 provided the incentive needed for the central government to execute a natural forest protection project in earnest. This project sought to protect natural forests by stopping the cutting and restoring the existing natural forests along the upper and mid-streams of the rivers. A negative outcome of this project was that China relied heavily on imports to satisfy its rising demand for wood. China is now the world's largest timber importing country. As the export of timber to China has increased, deforestation in exporting regions such as Siberia and south-east Asia has accelerated.

The main tasks of forest management in China are to tackle the shortage of forests and their poor condition through enlarging the forested area and improving maintenance, and to provide enough wood and other forest resources to support further economic development.



Source: State Forestry Administration (2003)

Note: "Wood products" excludes bamboo products.

Figure 2: National wood products supply in the PRC

The history of forest management

System, policies and laws concerning forest management

The system, policies and laws for forest management in China have been implemented by the CCP leaders in a manner that conforms to the model of state building ordained by the party.

1949 to 1957

In October 1949, when the People's Republic of China was established, the Government Council (Zheng-wu-yuan) was created as a collective organ for national administration. The Ministry of Forestry and Reclamation was set up within the council to function as the centre of the national system for forest management. This was reformed in 1951 to become the Ministry of Forestry, which was given more autonomy and the mandate to specialise in policy making for forestry.

Internal stability was a primary concern of the CCP during the early years of the PRC. The Party considered forest management to be the key not only for securing a wood supply but also for staving off social unrest that might be caused by natural disasters, such as floods and land degradation, and by the decline of agricultural production in impoverished areas. The regime was already cognisant of the increase of natural disasters caused by the shortage of forests and the difficulty to procure wood. The first national principle of forestry stipulated by the People's Central Government in 1950 stated that "Every possible effort shall be exerted to protect existing forests and implement large-scale forestation in order to prevent natural disasters and secure sound development of cultivation and irrigation" (Editorial Committee for Chinese Forestry 1953, 18).

Based on this principle, the Ministry of Forestry and Reclamation and its successor, the Ministry of Forestry, issued a number of directives for forest protection and forestation during this period.[6] However, because a national system of administration to implement these directives was lacking, confusion on a large scale in rural areas resulted. In particular, the land reform that was promoted as a main political target of the CCP included confiscating landowner's forests and redistributing large forests to the state and small forests to individual peasants or groups of peasants. The land reform policy changed the form of forest ownership and management drastically. Yet, the determination of forest rights did not proceed as expected and many disputes arose leading to scrambles for forest resources. All actors—farmers, traders, local government officials and stationed troops—took part in the cutting of forests (Ministry of Forestry and Reclamation 1950, 5). Another important result of the land reform was that areas of large forests existing mainly in the north-east and the south-west were nationalised, providing the basis for the state-owned forests of today.

During the subsequent period of the first Five-year Plan (from 1953 to 1957), a nation-wide system organised by the central government was established to mobilise people for large-scale forestation. During this period, the administration promoted a political agenda named "general line for the transitional period." For the cause of economic construction based on rapid socialist collectivisation, the administration continued to emphasise the importance of increasing and preserving forest resources to ensure the timber supply and prevent natural disasters. The establishment of this system of large-scale forestation was closely linked to the promotion of socialist collectivisation. From around 1952, the CCP leaders started explicitly recommending collective forest preservation and forestation for mitigating natural disasters.[7] By 1954, collective style operations reportedly accounted for 70 - 80 per cent of annual forestation.

[6] For example, the "Instructions for the Spring Forestation" was issued in 1950 and 1952, and the "Instructions to Prevent Forest Fires by All Means" was issued in 1952 (Editorial Committee of Contemporary China Collection 1985, 76-78, 527-528).

[7] For example, see "The Minister of Finance Deng Xiaoping's Report of the National Budget in Fiscal 1954" (Japan Institute of International Affairs 1971, 188-198).

Lester Ross noted that through this process, collectivisation advanced faster in forestry than in agriculture as a whole, which officially started in 1954 (Ross 1998, 29-30). This indicates that the CCP leaders realised that forest preservation and forestation would legitimise and foster their socialist collectivisation by demonstrating "the merit of scale" through the prevention of natural disasters and the growth of forest production.

During this period, a top-down system was constructed by the central government to enforce its orders to foster collective forest management. As socialist collectivisation proceeded from mutual aid teams to "primary agricultural producers' cooperatives" and to "advanced agricultural producers' cooperatives," the ownership of forestland and the right of managing forests were transferred to these collective units. Local units, such as "forestry producers' cooperatives" and "forestry working stations" for collective forest areas, and "state forest farms" and "forest managing stations" for state-owned forest areas, were set up for the mass mobilisation of the population for forestation and forest preservation as directed by the central government.[8] Every province established a forestry department as a subsidiary of the Ministry of Forestry to receive policy directives from the centre and transmit them to the forestry bureau of the county government. Concurrently, state-owned forest industry enterprises were established and began full-scale operations to produce timber in the large natural forests in the north-east, southwest and Hainan Island.[9] In 1954, the central government began setting up a system for planned timber production and distribution, in line with its efforts to construct a planned economy system for other industries. China Timber Company, a state-run company under the Ministry of Forestry, was established as the control tower of timber distribution, and its regional offices became the sole agency for the local people and units to buy and sell timber.

The Great Leap Forward

During the "Great Leap Forward" from 1958 to 1960, reckless production plans and excessive egalitarianism endorsed by the policy of the centre disrupted China's domestic economy so drastically that tens of millions of people in rural areas starved to death. As for forestry, the previous policy that had sought to increase and preserve forests was summarised during this period under the slogans of "green the homeland" (*luhua zuguo*) and "make the land a green garden" (*Dadi Yuanlinhua*). These slogans reflected the ideals of Mao Zedong. Attempts were made to "leap" further to "make the whole land of China green for the cause of socialism." The people's commune, a larger and wider unit than the advanced agricultural producers' cooperative, was established as an organisation that owned and managed collective forestlands. On 7 April 1958, the Central Committee of the CCP and the State Council, which succeeded the Government Administration Council in 1954, issued "Indications on launching afforestation energetically throughout the country" (Office of the Ministry of Forestry 1960, 1-6). The "indications" required efforts to mobilise and train the people for large-scale forestation, to improve the skills of the people for forestation, and to set regulations on aftercare management in collective and state-owned forestlands. Commune forest farms under the people's communes and state forest farms on state-owned forest areas were designated as the units for implementation. In 1959, 46,396 commune forest farms and 2,326 state forest farms were built as chief stations for prosecuting forestation (Yuchuan 1960, 180). These local units are presently operating as township/village forest farms and the state forest farms, though they have changed their forms of management. In conjunction with the slogan of "make the land a green garden," the central government gave the instruction to "plant trees on the four sides." The goal of this policy was "to cover all the sides of houses, villages, roads and waterways and streams with trees" (Yuchuan 1960, 181).

8 See "The Basic Conditions of Forestry in 1956 and the Mission of Operations in 1957" in Office of the Ministry of Forestry (1959, 45-65).

9 See "The Plan to Develop Changbai Mountain Forest Area has been Completed," The People's Daily 1 Jan. 1957; "Xikang Province Begins a Large Scale Survey on Forest Resources," The People's Daily 29 March 1955 and "The Survey Team Organized by the Central and Guangdong Agriculture and Forestry Agencies Explored Tropical Forest Resources in Hainan Island and Leizhou Peninsula," The People's Daily 1 Sept. 1954.

Period of adjustment after the Great Leap Forward

For all this political emphasis on forests, the Great Leap Forward caused serious deforestation. As deforestation was accelerated by reckless steel production during the Great Leap Forward, the CCP leaders again realised the importance of sound forest management. In March 1963, as the "Adjustment Policy" was in place, the State Council issued the "Regulations for Forest Protection," which was the first comprehensive legal provision for forest preservation since the founding of the PRC ("Regulations for Forest Protection," *The People's Daily*, 23 June 1963). The top-down system of policy implementation was not drastically changed, but the "production team" took over the position of local accounting units from the people's commune and was acknowledged to be responsible for forest management through a policy of adjusting forest rights. In accordance with this adjustment, many commune forest farms were decentralised and transferred to "production brigades" and production teams, which were both smaller units within the communes. These farms, which were generally called "commune-team forest farms," took the responsibility for local forest preservation and forestation. In the state-owned forest areas, state forest farms and forest managing stations that had been built in the 1950s continued to undertake the cutting, regeneration and preservation of forests.

During this period, the forest management system changed dramatically from large-scale afforestation undertaken by mobilising and organising local people to afforestation carried out only in appropriate seasons (spring and autumn), with aftercare management and other operations for forest preservation left to specialists. Forestation works continued to enlist local people every spring and autumn. Local implementing units, such as local organisations for forest preservation and special teams for forest management, were developed and forest rangers were appointed by the local collective units. They supported the work of the commune-team forest farms and the state forest farms. The central government established "forest managing villages" (*Yinglin cun*) as micro-accounting units for the state forest farms to improve forest regeneration and protection activities in the large state-owned forestlands in the north-east (Office of the Ministry of Forestry 1964, 62-65). Forest police were also recruited to protect the forests from fire and illegal logging.

The series of modifications of systems and policies for forest management were the central government's attempts to pursue a well-balanced, efficient style of forest management, especially for forest preservation. This transformation in forest management was in accordance with the overall "adjustment" in this period. The failure of the Great Leap Forward brought a reconsideration of blind dependence on the mass mobilisation method. The Regulations for the Protection of the Forests (1963), which legitimated and enhanced the existing system of forest management, ordained that the local forest management units be specialised and have clearly defined tasks. This specialisation actually resulted in the strengthening of the top-down administration system. It is also true, however, that increasing demands for wood due to the economic reconstruction made it inevitable that tree cutting would continue and even resulted in the exploitation of natural forests. During this period, the central government unwittingly permitted the development of natural forest resources inland such as in the Da-Xinganling mountains in the north-east and in the Jinsha River basin in the south-west (Editorial Committee of Contemporary China Collection 1985, 100-101).

The Cultural Revolution

Our understanding of forest management policy during the period of the Cultural Revolution in the late 1960s is limited by the shortage of data. The Ministry of Forestry was placed under a martial control committee that was under the direction of the Central Revolutionary Committee with Mao Zedong and the "Gang of Four" at the centre. The forest management system appeared to be in a state of confusion, being shaped by political struggles against persons in authority that resulted in the recall of administrative leaders and the transference of forestry bureaucrats and intellectuals to lower levels. However, this confusion did not

entirely destroy the system that had been established during the preceding period of adjustment. For example, following Mao Zedong's direction to launch plans for rural development that would closely link agriculture, forestry and livestock farming, the centre's policy continued to sustain the combination of the specialised forest management unit with revolutionary leaders and local people.[10] In several counties in Shandong Province, cadres and peasants organised forest management groups and practiced "*Fengshan yulin*," a method in which they fenced wastelands and deforested areas for the natural regeneration of forests ("Shandong Deploys the Activity of Large-scale Forestations," *The People's Daily* 30 March 1967). These examples reveal that the system of forest management by specialised agencies was in part maintained during this period. In sum, the policy that was initiated during the period of adjustment that aimed at the rational management of forests was not denied by the Cultural Revolution and was carried over to the 1970s.

After the Cultural Revolution

As the political confusion of the Cultural Revolution gradually faded in the early 1970s, the administrative system, including that of forestry, was restored. On 1 March 1970, the Ministry of Forestry was released from military control and immediately incorporated with the Ministries of Agriculture, Reclamation and Irrigation to become the Ministry of Agriculture and Forestry. In the 1970s, the central government emphasised mass mobilisation for large-scale forestation and employed the slogan of "greening homeland." It also required strict execution of the Regulations for Forest Protection, other forest policies and legal provisions. Comprehensive construction projects combining agriculture, forestry and livestock farming were initiated and comprehensive land conservation projects were launched in earnest, mainly in the regions lacking forests.[11]

Forest fires and destructive lumbering remained serious issues, but the central government never found effective solutions. In state-owned forestlands in the north and the South Collective Forest Region, the rate of deforestation and desertification caused by the conversion of forests to farmlands and reckless tree felling reportedly accelerated in various locations.[12] At around the same time as the U.N. Conference on the Human Environment in 1972, water pollution in Dalian Bay and Songhua River were acknowledged as serious concerns, exemplifying the deterioration of China's environment (Kojima 1996, 52-67). The CCP leaders began to accept the pollution and destruction of China's natural and living environments as "environmental problems." The first National Conference of Environmental Protection was held in 1973, adopting the document "Some Rules for Environmental Protection and Improvement" as a tentative draft. China's forest management policy, which had previously aimed at increasing and preserving forests, was reformulated as an "environmental policy" for forests.

The period of economic reform and openness

The largest change for forestry entering the period of economic reform and openness to the outside at the beginning of 1980s was that private actors joined the collective units in managing the forests. This change was linked with the policy that launched the agricultural production responsibility system. For state-owned forestland, a state forest farm was now permitted to contract out forestation and forest management to other collectives and private actors, such as villages and households near the forestland—workers who had been employed by the forest farm and even private companies. For collective forests and wastelands, a forest production responsibility system was introduced by which collective lands were contracted out to individual farmers for forestation and man-

[10] For example, "Develop the Forestry Models Rapidly," The People's Daily 10 Dec. 1969.

[11] For example, the building of shelterbelt forests was started in the central plain in this period. See "Forestation on the Central Plain Makes a Fruit both of Foods and Forests," The People's Daily 30 Nov. 1977.

[12] For examples see Forestry Bureau of the Ministry of Agriculture and Forestry (1977, 7) and "Jungles in Xishuang Banna and Desertification," The People's Daily 18 July 1978.

agement. Furthermore, the ownership of forests and trees by individuals under the concept of "family mountain"[13] (*Ziliushan*) was legitimised (Editorial Committee of Contemporary China Collection 1985, 372-376). Subsequently, in 1982 the central government launched the national compulsory tree-planting campaign, which imposed on every citizen (aged between 11 and 60; up to 55 for females) the obligation to plant three to five trees per year.

A second change in this period was the progress of ordering the forest-related laws. This was linked to an overall policy change, that is, a transition from the "rule by the individual" to the "rule by law." On 20 September 1984, the "Forest Law of the People's Republic of China" was promulgated as the fundamental law of forestry. Soon after, the central government quickly established a system of laws and bylaws concerning forest management.

To implement these policy changes and enforce legislation, the system of top-down forest administration was further strengthened. At the centre, the Ministry of Forestry was again made an independent body for forest administration in the State Council. A number of large-scale, state-funded forestry projects were launched, beginning with the Three North Shelterbelt Project, which was given the task of building a "green great wall" across the northern, north-east and north-west parts of China. The projects were authorised as the "ten state forest ecology projects" of the 1990s. The Central Afforestation Committee (now the National Afforestation Committee) was established with subordinate bodies at the local level. Its objective was to promote forestation nation-wide, especially through the national compulsory tree-planting campaign. With the goal to control forest fires, the Armed Forest Police were deployed in the areas of large state-owned forestlands of the north-east. However, the privatisation of the rights of forest management and the lifting of the planned production and distribution system for timber caused the acceleration of uncontrolled tree felling, especially in the South Collective Forest in the middle of 1980s. In response to this situation, the central government set annual forest cutting quotas for harvesting trees.

Features of forest management in the PRC

The above historical review of the system, policies and laws for forest management in the PRC period can be summarised as follows. First, at the level of the central government, the main objective of China's forest management policy throughout the past fifty years has been to increase and preserve forests by implementing forestation and forest preservation measures. Administrative and legislative systems to achieve this objective were built up through each period. Second, despite this objective, the central government has constantly been compelled to allow collective and private units to cut down trees in order to meet the increasing demands for wood. The forest policies and laws were not faithfully carried out nor adhered to at the basic level of society. Third, and more importantly, the implementation of forest management policies was strongly subjected to political changes that were heavily tinged with conflicts among the CCP leaders. In particular, the policies of forest ownership and management were affected by the turnarounds in the direction of the CCP's state building policy in each period. The scale and range of forestation and forest preservation were strongly influenced by the directions from the centre, which in turn was affected by the awareness of the CCP leaders.

In the spring of 1998, as a part of the reform to streamline the State Council, the central government reorganised the Ministry of Forestry as the State Forestry Administration (SFA), a smaller organisation under the direct supervision of the State Council. However, confronted with the flooding of the Yangtze and Songhua rivers that summer, the CCP leaders again emphasised the importance of the public good value of forests. The SFA was given a strong mandate to execute several large state projects, including the "Natural Forest Protection Project" and the "Land Conversion

[13] "Family mountain" refers to sloping land that is allocated to households for their individual purposes. The author believes that "family mountain" is the most correct translation of "Ziliu-shan." "Ziliu-di," which invests the same type of rights in the individuals on non-sloping, non-forested land is translated as the "family plot."

Programme from Farmland to Forest."[14] Judging from the history of centralised control behind the systems, policies and laws for forest management, the recent changes can be considered a continuation of China's top-down style of forest management. The recent changes reflect the CCP leaders' renewed determination to implement a more aggressive policy to increase and preserve forests; the leaders are at least more aware that forest loss is a cause of flooding, desertification and droughts. The revision of the Forest Law in 1998, to be followed by the streamlining of forest laws and bylaws, is meant to strengthen the system and policies of forest management (Hirano 2004a, 53-64).

Impacts of the centralised system of forest management on local society

Given the centralised system of forest management over the past fifty years in China, it is pertinent to ask how the relationship between the people and forests has been transformed at the local level. To answer this we must distinguish between local changes that reflect geographical variations and nation-wide changes that originated from policy implementation by the centre.

Organised forestation and forest preservation

The first nation-wide strategy of forest management that penetrated local society, one that has continued from the 1950s to the present-day, was large-scale campaigns to mobilise people for forestation and forest preservation. Despite being centrally planned, the features of these campaigns were transformed by regional characteristics.

Shortly after the PRC was established, limited forestation was attempted in just a few areas, such as the Yellow River basin where natural disasters were especially serious because of environmental degradation. In the mid-1950s, the forestation programmes were expanded to other regions. In the areas containing large state-owned forestlands, local administration units organised local people and skilled immigrants from densely populated areas to implement large-scale programmes of cutting, regenerating and preserving forests. In the north and north-west regions where forests were scarce, numerous attempts at mass mobilisation were made to mitigate the impacts of natural disasters. These were directed at the establishment of protective forests for the purposes of water conservation, preventing soil loss and sand movement and as windbreaks. In the spring of 1954, trees were planted by large groups of local people along streams above dams and on the sides of rivers and gorges. In the eastern region, forests were established for water conservation, while in the north-west region forests were planted for water supply, to act as windbreaks and to suppress the movement of sand ("The Springtime Forestation has been Actively Carried Out in Various Mountainous Areas and Forestlands," *The People's Daily*, 8 April 1954). In the South Collective Forest Region, the collective units that organised farming and the households managing forests were made responsible for protecting forests from fire and illegal lumbering and for replanting deforested lots. Minority groups were required to participate in forest protection in the areas in which they resided ("The Ministry of Forestry held the National Conference on Workings for Forest Protection," *The People's Daily*, 13 Sept. 1954).

As the socialist state's building progressed, the range of local actors participating in forestation and forest preservation was extended. The state forest farms, the forestry work stations and the forestry producers' co-operatives were the regular units for forestry. Stationary troops of the People's Liberation Army (PLA), local organisations of the Communist Youth League of China, the Women's Federation and other groups were gradually added as operational agencies. By the middle of the 1950s, in Shanxi Province for example, besides forests managed by villages and households, forests had been named "youth forest," "women's forest," "soldier's forest," "school forest," "factory forest," and "troop's forest," to reflect the broad range of local actors now involved (Committee for Compiling the Records of Shanxi Province 1992).

[14] The main aim of this project was to convert eroded and steeply sloping agricultural lands to forestry use. As with the Natural Forest Protection Project, this project was started in earnest during this period.

The involvement of PLA troops in forestation provides an illustration of how local actors were engaged by the centre. In 1954, the General Staff Headquarters and the General Political Department issued "Indications for troop's participation in the workings of forestation" (Editorial Committee of Contemporary China Collection 1985, 533). The *People's Daily* reported that in Xinjiang Uighur Autonomous Region, the Production and Construction Corps of the PLA made a remarkable contribution planting protection forests ("The Xinjiang Construction Crops Forested over Ten Thousand Mu," *The People's Daily*, 26 April 1955). In the field of forest preservation, standing troops in the north-east supported local units in forest fire prevention. As another illustration of local involvement, in 1956 the "Five Provinces Convention of Youth Forestations"[15] was held in Yen'an. This conference, sponsored by the New Democratic Youth League,[16] organised and mobilised more than several tens of thousands of young Chinese to plant protection forests along the upper and middle Yellow River. Local organisations of the Women's Federation were also employed to mobilise people for forestry. These and other actors who became responsible for mass mobilisation at the local level for forestation and forest management were, first of all, organisations for the implementation of the socialist state building model.

In the period of the Great Leap Forward the central policy organisations did not ignore forestation and forest preservation. However, ill-advised plans were endorsed in every field, including food and steel production and forestation, causing local society to experience serious labour and food shortages. As acute starvation spread in rural areas, people were less able to engage in time and energy consuming activities such as afforestation and aftercare management. Large-scale forestation by mass mobilisation was no longer possible. People were forced to fell trees beyond sustainable rates in order to provide the fuel needed to meet overly ambitious steel production targets and for their daily living.[17] The leaders of local units and governments caught up in the enthusiasm of the Great Leap Forward faced a dilemma: How were they to deal with the ill-advised forestation plans sent down from above and the serious labour and food shortages at the local level? Their answer was to submit false reports of the achievements of forestation.[18] As a result, both the goal of sustainable forest management and the enthusiasm of the local people for forestation and forest preservation were completely undermined.

During the period of the Adjustment Policy in early 1960s, in correcting the flawed policy of the previous period, the local implementation of forest management by production teams and specialised units was carried out to produce relatively steady operations of forestation and forest protection. Despite the upheaval of the Cultural Revolution, these collective units continued to mobilise local people grouped under the socialist framework and implement forest management policies sent down from the centre.

As China entered the period of economic reform and opening up to the outside, and its collective forest management system faded, local people became involved in forestation and forest preservation throughout the household responsibility system and the national compulsory tree-planting campaign. In the South Collective Forest Region, in addition to town/village forest farms, which had directly evolved from the commune-team forest farms in the 1970s, forest farming households came into existence through the forest production responsibility system—the "family mountain" and shareholding. Individual households were engaged in forest management for the private consumption of wood, harvesting and replanting trees. Under the socialist market economy, the system of planned timber production and distribution was abandoned. An open timber market was temporarily established in the middle of the 1980s, accelerating the free exchange of timber. In the northern

[15] The five provinces were Shaanxi, Gansu, Shanxi, Inner Mongolia (Autonomous Region) and Henan.

[16] The following year it was renamed the Communist Youth League of China. Similar to the CCP and the state organisations, the Communist Youth League has subordinate organisations at every administrative level, including provinces, counties and townships. Their main activity has been to implement the CCP's directions for youth, though they have been strongly inclined towards leading mass movements at the local level.

[17] For example, see Zhenlin (1963, 4-11).

[18] Ibid., 24.

regions, where forest degradation was associated with increased aridity, the local governments and units tended to invest the responsibility for greening "wastelands" in households and private companies. Project-based activities, such as the Three North Shelterbelt Project, were also introduced and became popular. Each project depended on financial investment from the central government and employed a top-down forest management system that passed down numerical greening targets.

The two approaches were both characterised by the intention to create incentives for local society to participate in forestation. In the areas of large state-owned forestlands in the north-east and south-west, local people are still organised into units to engage in forest management, such as the state-owned forest farms, the special teams or other state-owned enterprises. The units participate in forest preservation under the command of the local Armed Forest Police and the Forest Police.

Forms of forest ownership and management

The second nation-wide change in forestry was the turnarounds of the forms of ownership and management of forestlands and trees. These turnarounds were subject to the general changes in the course of the CCP's policies and impacted nationwide, except for some of the autonomous areas inhabited by minority groups. The turnarounds have manifested differently according to the characteristics of the natural and social environments of each region.

The first major change for forestry after the foundation of the PRC was the land reform that was implemented around 1951. Forests that were owned by the former regime and landowners were confiscated, large areas of natural forests in the north-east and south-west were nationalised and small forests were redistributed to local peasants. At this point, national and private forests coexisted in the PRC. The former took common ownership and were termed "state-owned forests," with the form of management changing from one period to another. By contrast, the ownership of private forests took a complicated course of changes that needed a more detailed description. In the first period, the forms of the ownership and management of private forests varied; local people, communities, companies, schools, and kinship families owned and managed forests. Although the ownership of forests by the gentry, shrines and temples mostly disappeared, some traditional forms of management remained.

These various forms of ownership were integrated for the cause of socialised collectivisation in the period from the early 1950s to the Great Leap Forward. The first step of this turnaround was a change around 1954 in which a form of private management was developed into primary collective units, such as forestry producers' co-operatives and primary agricultural producers' co-operatives. Management activities were collectively carried out by the co-operatives, but the forest ownership still belonged to the individual co-operative members. The second step, taken in 1956, was to give fundamental ownership of land, including forestland, to the advanced agricultural producers' co-operatives. However, considering that the principle of "the planter owns the trees" still seemed to be practice in many places, the right to dispose of the planted trees partially remained in the hands of the individual members. In certain areas in the south, farmers continued to use forests for their daily fuel and timber needs, despite the existence of the advanced agricultural producers' co-operatives. It is remarkable that, despite the development of socialised collectivisation, trees were separated from the forestland under the forms of forest ownership in the PRC.

The third step of the turnaround was the establishment of "people's communes" during the Great Leap Forward. The ownership of trees and forestlands was completely collectivised under the communes. The commune forest farms took charge of managing the trees and forestlands. The collectivisation of forest ownership had been completed both nominally and practically, with no place left for traditional or private forms of forest management.

During the Adjustment Policy period, the forest management entity was downgraded to production teams to correct the extreme collectivisation

during the Great Leap Forward. However, the ownership of the forestland and almost all of the forests' trees remained in the hands of the three levels of collective units: (in order of authority) 1) people's communes, 2) production brigades and, 3) production teams. In reality, some production teams invested the responsibility of forestation and aftercare management with their members and the principle of "the planter owns the trees" was revived in several areas.[19] Local people, as members of the teams, only had complete ownership of the trees that they had planted under the "four sides" programme.[20] As the production teams appear identical to the advanced agricultural producers' co-operatives, the institutional structure of forest management in this period can be considered similar to that in 1956, other than with respect to scale. Attempts were made to revive the previous form of forest management through the production teams with the village as the basic unit. In the next period of the Cultural Revolution, however, collective units in most areas again confiscated privately-owned trees. Privately-owned and managed trees were labelled and criticised as one of the "sprouts of capitalism."

In this manner, the turnarounds of the structure of forest ownership and management at the level of local society were subject to the changes in politics with respect to socialised collectivisation from the 1950s to the 1970s. This was a process in which forest management at the local level was gradually embedded in collective units that were built and reorganised throughout these periods.

In contrast, from the period of economic reform and openness onwards, the form of forest ownership and management shifted away from the former collective units. This turnaround was subject to political policy reform. In accordance with the introduction of the agricultural production responsibility system, the reconfirmation of forest rights was implemented in every region by a method called "three definitions." Private actors were granted the right to manage state-owned and collective forestlands and wastelands. They also were given the responsibility for forestation and forest preservation, land-use rights and the ownership of trees from the former collective units. The "forest production responsibility system" invested the responsibility of managing collective forestlands with the private sector, including households and companies. The "family mountain" gave the rights to use forestlands and the ownership of trees to local farming households for their daily needs. The contracting out of state-owned forests to individuals was also legitimised. This legitimatisation produced several forms of household-based forest farms and joint forestation. The overall privatisation of forest management in China was shaped according to the above processes. The private forms of management were quickly expanded in all regions.

The rights concerning forests in China can be divided into at least four categories: i) land ownership, ii) land-use rights, iii) the responsibility of management, and iv) the ownership of trees. This division of rights is the key factor in establishing various forms of management to arouse private interest in forestation and forest preservation, while maintaining the socialised ownership of land. The turnaround diversified the form of forest management under fixed ownership.

From 1992 onwards, private forms of forest management again flourished reflecting the acceleration of economic reforms. In 1994, the Ministry of Forestry formulated ten principles for auctioning the "four wastelands"[21] in order to stimulate private interest in forestation. The principles regarded the rights of land-use and the responsibility for contracted management as almost equivalent, stressing the need to fulfil the contracts in accordance with the management standards and permitting the auctioning of public properties to the private sector. The principles set the contract period at a maximum of seventy years and provided for an extension (State Forestry Administration 2000, 191). In addition, under the slogan of developing "non-public forestry,"[22] the succession, renting

[19] See, for example, "Henan Province is Developing Springtime Forestation," The People's Daily, 28 Feb.1962.
[20] This right was legitimised by the 1963 Regulations for Forest Protection.
[21] This includes unmanaged barren mountains (hillsides), gullies, deserts and wastelands suitable for forests.
[22] This slogan refers to the opening of the rights to use forestlands and the ownership of trees to the private sector.

and re-selling of the rights to use forestland and the responsibility for contracted management was publicly approved in the latter half of the 1990s.[23] As a result, not only local but also external private actors such as multinational companies have begun to manage forests and wastelands for forestation and forest production. Large timber plantations were established by companies and under shareholding systems, especially in the southern regions, local society experienced further diversification of the forest management structures.

Contemporary features and problems of forest management

The relationship between people and forests has changed according to changes in the direction of state building pursued by the CCP. Keenly aware of the acute shortage of forests, the CCP leaders vigorously sought to increase and preserve forest resources for the wood supply and to improve the state of the natural environment. They adopted mass mobilisation as the means for forestation and forest preservation, without deviating from their broader goal of state building. The masses were mobilised to participate in the activities that stemmed from the forest policies that the CCP leaders deemed appropriate. The policies identified various forms of forest management which underwent many turnarounds reflecting changes in the course of national politics. During this fifty-year history, an administrative system of forest management was constructed to propagate the direction of state building established by the centre which permeated down to the basic level of local society. The key element of this system has been top-down policy implementation of forest management.

Contemporary features of forest management policy

The current policy implementing system of forest management maintains the structure of top-down flows from the centre to the local level (Figure 3). The State Forestry Administration within the state council is the central unit of forest administration, forming a hierarchical policy implementation system with its subordinate organisations at all local administrative levels. Every upper organisation has absolute authority over each lower organisation. The CCP, which is constitutionally guaranteed the position of leadership of the PRC, has formed a ring of local chapters in parallel with the administrative structure to exert its political influence. This structure is viewed as essential to accomplish the goal of increasing and preserving forests nationally.[24]

When considering the laws pertaining to forest management, some semblance of a legal system (Figure 4) exists based on past policy. This system is clearly characterised by the regulation and control of local activities towards promoting forestation and forest preservation (Hirano 2003). The Forest Law, which was experimental in 1979, promulgated in 1984 and revised in 1998, is categorised as a state law and is the fundamental law of forestry. It embodies in every article the purpose of a "greening homeland" by increasing and preserving forests. The "Regulations for the implementation of the Forest Law of the People's Republic of China," issued by the state council as details in 1986 and revised as regulations in 2000, are intended as the administrative instructions to enforce the Forest Law. Regulations and administrative orders were formulated for respective policy issues. To deal with forest-related environmental issues that have drawn global attention, a number of specific state laws were issued, typical of which are the Law of the People's Republic of China on the Protection of Wildlife (1988) and the Law of the

[23] These were legitimised in the revised Forest Law of the People's Republic of China in 1998.
[24] For example, Yinsen and Jiashun (1995, 62-65).

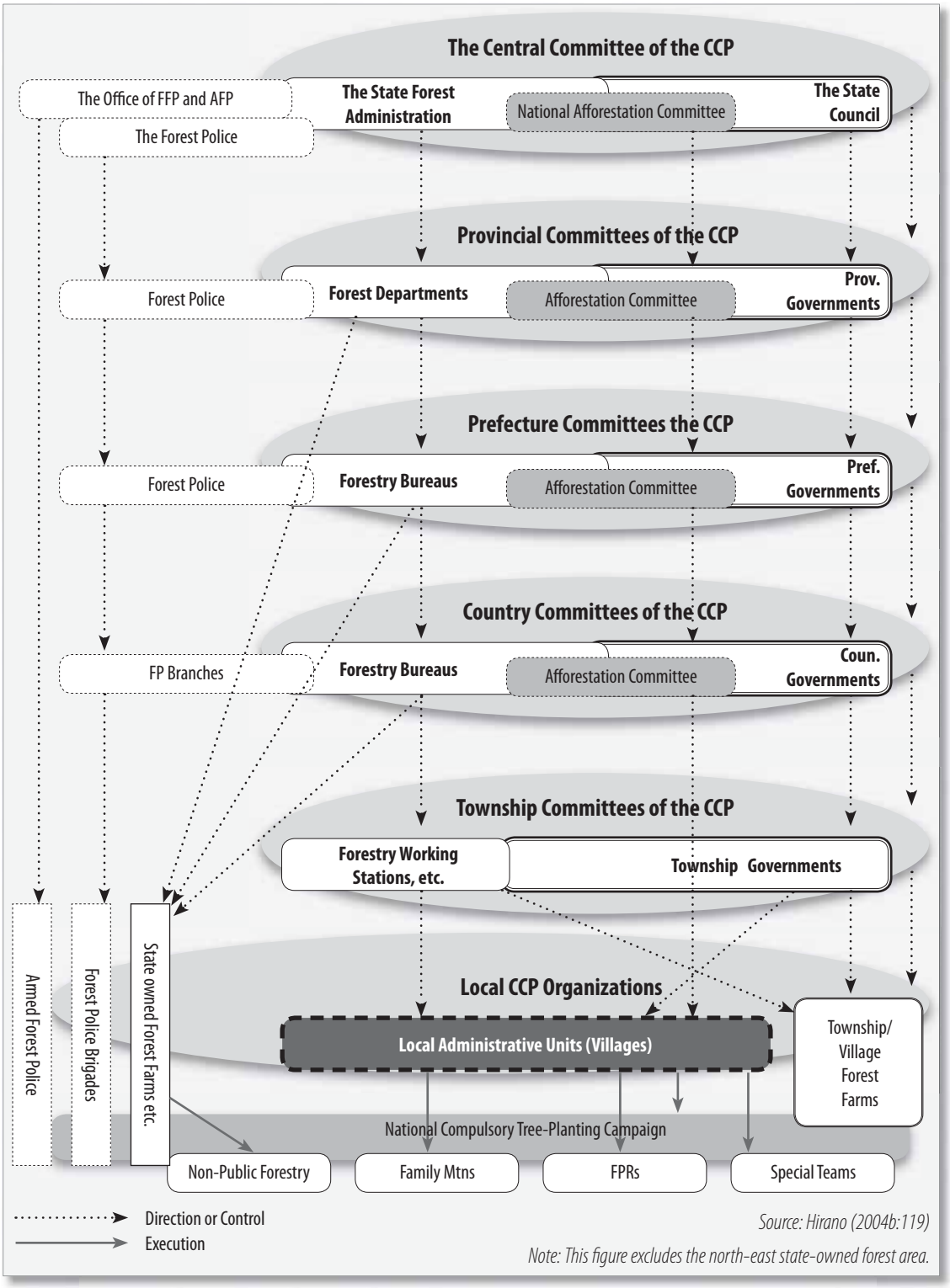


Figure 3: Contemporary forest policy implementation system in the PRC

People's Republic of China on the Prevention and Redress of Desertification (2001) (Hirano 2004a).

The floods in the summer of 1998 drove the CCP leaders to implement a more advanced forest environmental policy. The most remarkable result was an upturn in the tendency for project-based policy implementation by the central government. In 2001, the "Big-Six Special State Projects for Forestry" was launched, integrating the following six projects: the Project for Natural Forest Protection; the Land Conversion Programme from Farmland

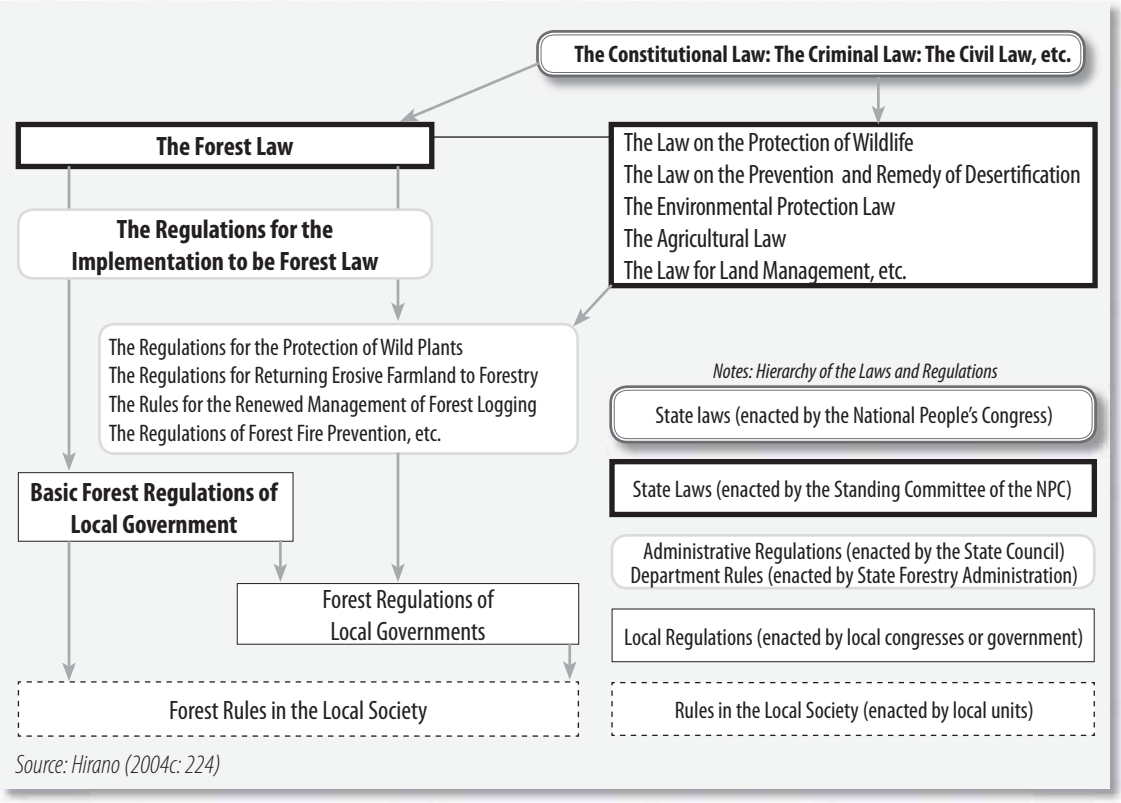


Figure 4: Current legal system concerning forest management in the PRC

to Forest; the Project for Forest Protection in the Three Norths and the Basin of Yangtze River; the Project to Remedy the Source of Wind and Dust around Beijing and Tianjin; the Project for Wildlife Conservation and Building Nature Reserves; and, the Project to Build the Bases of Rapid Growth Timber Forest. The prime reason why the gross investment in forest management overtook that in the forest industry in 1998 and has been rapidly increasing ever since, is that the central government is pouring extensive funds into these special projects. In terms of investment, the Natural Forest Protection Project and the Land Conversion Programme from Farmland to Forest are the two biggest projects. They were both spurred by the 1998 floods and are to prevent ecological degradation caused by the paucity of high quality forest cover.

Reluctant participation by local people

The current forest management policy in the PRC, despite reforms in various quarters, continues a legacy of seeking to overcome the shortage of forest cover through top-down policy emanating from the centre. Establishing and implementing policy through this top-down system is problematic. While integrated projects and numerical goals are sent down to the local level, it is difficult for the local government and organisations to implement their own activities that take better account of regional specifics. Under the existing circumstances, local leaders are apt to prioritise the tasks imposed from above, especially to keep their positions and for promotion. In addition, in the process of implementing forestry projects, the intentional suspending, embezzling and diverting of project funds or making false reports frequently occurs (Shengxian 2002, 33-39). It is difficult to check and confirm the results of policy implementation at each local administrative level; the same CCP chapter takes the reins of all political actions, including those by the judiciary and the government. This raises doubts as to whether the reported increases in forest cover indicate any improvement of the actual forest environment in China. The central government is seeking ways to resolve these problems, such as through effective law enforcement, establishing an organisation to supervise implementation, and increasing the awareness of local people

and leaders through education. It is doubtful whether these measures will be successful.

A more fundamental problem is that it is almost impossible to see any enthusiasm amongst local people for participating in state-led forest management initiatives. Despite the many state-led programmes, deforestation by local people has continued. In regions such as the Yellow River basin, the paucity of forest cover has resulted in daily shortages of fuelwood and timber for a large number of people, acute water shortage and land degradation. For all the attention forestation has received from the CCP since the 1950s, the damage of wind and dust in northern cities has worsened due to desertification. With soil erosion and net soil outflow from the Ocher Plateau, the flow of the Yellow River has been frequently blocked since the 1970s. Local people in this ecologically sensitive region would rather cultivate farmland and cut down trees to increase their short-term income than use land for forestation. The acceleration of illegal, destructive lumbering, combined with inadequate aftercare management of forestation areas, has reduced the benefits of past forestation. In Henan province, for example, environmental degradation has accelerated because planted protection forests were destroyed and converted to farmlands by local people (*The People's Daily* 4 Jan. 2001). In other provinces, the local people have felled almost all of the trees planted as protection forest under provincial projects.

The central government launched the "Project for Large-Scale Development of the Western Region" to promote investment and build an infrastructure for economic development in this inland region, in order to redress the disparity with the coastal regions in the east. The slogan "build a desirable ecosystem by forestation and forest preservation" was employed, but the protection forestlands are frequently occupied and converted into building sites or farmlands.[25] In the large state-owned natural forests, because of the past lumbering for domestic wood supply, the volume of timber within the forests has decreased and the forest ecosystem has been seriously degraded. Although the Natural Forest Protection Project strictly restricts lumbering in natural forests, the increasing demands for wood, and the deteriorating finances of the state-owned forest enterprises caused by this restriction, invite destructive, commercial lumbering.

In the South Collective Forest Region, human actions to transform forests into farmlands have triggered forest fires, floods and land degradation in increasingly large areas (Ibid.). Moreover, local management units often report falsely on forest management to higher administrative units, while cutting trees above quotas.[26]

Further evidence for the lack of enthusiasm for forestry amongst the local people is the fact that forestation and forest preservation depend more and more on investment from the central government. In 2002, the total fund for forest planting was CNY 37,184 million, of which 75 per cent was provided by the central government. More than 70 per cent of these funds were injected into the Natural Forest Protection Project and the Land Conversion Programme from Farmland to Forest. In contrast, the central government has covered only half of the management costs of the Project for Protection Forest in the "Three Norths" and the Yangtze River basin, with the remainder being met by the local governments and non-governmental sectors. In some areas selected for this project, the efficiency of forestation was remarkably high during the periods when more investment was contributed by the central government. In Shaanxi province, for example, the growth rate of forested zones reduced considerably following reduction of the central investment. This tendency suggests that it is difficult to mobilise local people to implement forest management, however desirable it might be, without financial support from the central government.

The lack of informal, locally-based, voluntary groups for forestation and forest preservation, in contrast with the increase of NGO groups working to improve urban living environments, is additional evidence that enthusiasm for forestry is

[25] To check this tendency, the state council issued the "Notice for Protecting Forests and Restraining Destructive Cultivation and Reckless Occupation of Forestlands" to freeze the occupation of forestlands by all kinds of building projects. See State Forestry Administration (1999, 28-29).

[26] For example, see *The China Green Times* 6 Dec.1999.

lacking among local people. With China opening up to the outside, more and more international organisations and governments of developed countries have been implementing aid projects to improve the forest environment of China. The numbers of multinational enterprises and NGOs that are involved in "greening" activities have rapidly increased in recent years. However, there are hardly any domestic NGOs engaged in improving the extent and quality of forest cover. To the contrary, it seems that the roles of governmental actors in forestry, both the administrative and the CCP organisations, are strengthening (Hirano 2004a, 116-129).

Structural factors hindering people's participation

Zhidong (1999) suggested that it would be appropriate to divide environmental consciousness into "consciousness of problems," "consciousness of causes," and "consciousness for solutions" in evaluating participation in environmental issues in the PRC. He believed that Chinese people living in local areas had good "consciousness of problems" but inadequate "consciousness for solutions." In other words, local people are not well-disposed towards spontaneous efforts to solve environmental problems; rather, they tend to entrust environment issues to the government (Zhidong 1999, 171-180). This perspective is useful for explaining the local people's consciousness of forest management in the contemporary setting. At the local society level, it is common to hear comments such as "natural forests have been destroyed" or "desertification and soil erosion have accelerated." But both the local government and private sector strongly believe that it is the role of the central government to solve these problems.

This "consciousness" does not fully explain why a negative, rather than merely a neutral, attitude exists among local people towards forest management. The negative attitude exists because over the past fifty years the PRC has pursued a policy of large-scale forestation to improve forest cover that has prevented local people from undertaking independent activities.

Although mass mobilisation for large-scale forestation and forest preservation was regarded as a significant contribution to the CCP's state building, this strategy gave little room to local people to manage forests and enjoy the returns. Since the advanced agricultural producers' co-operatives were established, the private ownership of forestland has not been permitted. Moreover, accompanying the changes of the political course of the CCP, the form of forest ownership and management has gone through many turnarounds. Liu Dachang reported that in some villages in Yunnan province, the ownership of fruit trees had changed seven times from 1956 to the end of the 1970s (Dachang 2001, 245). It had become difficult for local people to connect forestation and forest preservation coloured by political processes with their own welfare. They strongly distrust government guarantees of forest-related rights. Sustainable forest management is not possible in a setting characterised by a lack of enthusiasm amongst local people for increasing and preserving forests, and by tree felling and land conversion driven by the need to secure immediate livelihood needs.

This outcome was most visible during the Great Leap Forward at the end of the 1950s and during the period of economic reform and opening up to the outside in the middle of 1980s. During the Great Leap Forward, the large scale forestation campaign organised by the central government ignored the varying conditions of local society. Excessive targets for afforestation and forest protection were sent down from the central government to the regions. Mass mobilisation for forestation was carried out, but no attention was given to the tending of the trees that required specialised knowledge and long-term programmes. As a result, planted trees were mostly dead within a few years and the motivation of the local people for "greening homelands" diminished. A fundamental weakness of the mass mobilisation for forestation was that it ignored the relationship between people and forests within local society.

In the middle of the 1980s, the economic reform brought about the development of privately managed forests and the opening of domestic timber markets in most regions. However, contrary to the

intention of reform, the private actors accelerated deforestation. In particular, in the South Collective Forest Region existing forests were seriously destroyed after they were distributed to households under the "family mountain" and the forest production responsibility system. Deforestation was particularly rapid from 1981 to 1988 (Dafu 1998, 68). The main causes of deforestation were felling by private owners as well as the open market competition for timber. Households and other private actors who were granted forest management rights may have felt that they should immediately cut down the trees, for fear of another political change that might once again confiscate their management rights. This distrust among the local people of the top-down forest management structure is the consequence of the historical processes described above (Dachan 2001, 257-258).

As a measure to halt this deforestation, the central committee of the CCP and the state council issued "Indication on enhancing the management of forest resources in the South Collective Forest Region and firmly halting deforestation" in June 1987 (Forestry Department of Hunan Province 1987, 1-19). This directive clearly intended to limit the privatisation of forest management, stipulating that the existing forests with high concentrations of timber no longer be distributed to households. It also specified that only the forestry administration would be allowed to enter key producing counties to purchase timber. Although the privatisation of forest management is again being promoted, the administrative regulations over the domestic timber market are still partly in place. By building up the legal system centred on the Forest Law, tightening the regulations over the annual quota for cutting forest trees, and establishing an administrative permit card system for logging and transporting timber, the central government is endeavouring to regulate local involvement in forest management in order to preserve forests. Hence, not only do local people distrust the central government with respect to forest management, the central government now seems to distrust the local people as forest managers.

Conclusions

The forest management policy in China, despite the underlying intention of the central government to increase and preserve the forests, did not create or enhance awareness in local society of the importance of improving the forest environment, nor encourage spontaneous activities for this cause. The problems caused by the forest shortage and deforestation have not been overcome, yet the central government continues to insist on enhancing its regulative policy. Viewed over the history of the PRC, the policy making at the central level regarding forest-related environmental problems has been advanced. However, there has been a significant division between those who make policies at the centre and those who receive them at the local society level on the very point of how they each recognise forest management.

The current forest management policy that promotes project-based forestation and forest preservation through large investment from the central government reflects increased emphasis on the forest environment by the political leaders. Undesirable outcomes of this policy may be that it will widen the division between the centre and local society and prevent the local people from making spontaneous efforts for forest management. The Natural Forest Protection Project and the Land Conversion Programme from Farmland to Forest, the two massive, favoured projects of the central government, both seek to transform land used for productive purposes, for example, for producing timber, farming and cattle breeding, to forestation and forest preservation. Typical of China's top-down structure of forest management, these two projects did not engage local people in planning or design. The government and the CCP now find themselves under pressure to provide compensation so as not to aggravate inter-regional economic disparities and the negative views of local society

towards forest management. Given these circumstances, the government and the CCP should:

1. Reconsider contemporary forest policy in order to emphasise the need for local society, including local governments, units and people, to contribute towards desirable forms of forest management.

2. Seek out and assess initiatives of local society for sustainable forest management.

3. Establish policy, financial and organisational structures to support effective local models for forestation and forest preservation that reflect regional diversities and historical experiences and entrust a leading role in forest management to the local people.[27]

4. Encourage spontaneous, independent forestation and forest preservation by local society.

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[27] An example highlighted by Yoko Fukao is the "shrine society" (Miaohui) in the Ocher Plateau, which has the cohesive and financial prowess necessary for forestation in wastelands (Fukao 2000, 267-310).

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PART B: **In the shadow of the Tuigeng Huanlin programme in China**

Yoshiki Seki[28] and Xiang Hu[29]

Introduction

Hirano's discussion in the first part of this chapter describes the structural problems of China's forestation programme and the mass mobilisation strategy of the central government and reveals the reluctance of local people to participate in forestation. These structural problems are illustrated by field surveys of re/afforestation programmes.

In 1999, just a year after the catastrophic flood of the Yangtze River, the Chinese government launched the largest afforestation programme ever conducted in human history, namely "*Tuigeng huanlin*" (Land Conversion Programme from Farmland to Forest). This programme aims to convert farmlands deemed to be ecologically sensitive, such as those on slopes of 25 degrees or more, to forests. The farmers who agree to participate in the programme receive compensation and subsidies from the government. Compensation is provided according to the actual value of grain that would have been harvested on the original farm. The period of compensation is a maximum of eight years.

According to government sources, 19 million hectares had already been afforested under *Tuigeng huanlin* by the end of 2004. Through this and other programmes, China's forest cover ratio rapidly increased from 16.6% in 1999 to 18.2% in 2004, according to the national forest resources survey (*People's Daily*, 19 Jan. 2005).

However, it is important to look more closely at what has actually occurred at the local level of society in the shadow of this impressive national forestation programme. In this paper, the structural problems of forestation in China are analysed from the perspective of, and impact on, the local people using *Tuigeng huanlin* as an example. The contradiction between the government's desire to mobilise people for forestation and the increasing reluctance of people to be mobilised will be clarified.[30]

[28] Forest Conservation Project, IGES (y-seki@iges.or.jp).
[29] PKU-Waseda Joint Centre for Instruction and Research (beijing-offi ce@list.waseda.jp).
[30] The following analysis is taken from Xiang and Seki (2003) and Seki and Xiang (2005).

Impacts of Tuigeng Huanlin on participating farmers

Farmers are worried about the implementation of *Tuigeng huanlin* as they must convert farmland to forest under the programme. The government provides grain such as rice, wheat, and corn and some monetary remuneration to those farmers who surrender farmland to the programme. The amount of grain compensation for one lost hectare of farmland is 1,490 kg/year in the Yellow River basin and 2,240 kg/year in the Long River basin. The supply period of grain is five years for "economic trees" and eight years for "ecological trees" that are planted on the retired farmland. Fruit, tea and nut bearing trees are categorised as economic trees, while native species are categorised as ecological trees. The government programme aims to convert 15 million hectares of farmland to forest by 2010 (Chinese Committee for the Strategic Study of Sustainable Forestry 2002). If 15 million hectares are converted, at least 100 million farmers will lose part of their farms.

The impact of *Tuigeng huanlin* in mountain villages is different according to the percentage of cropland converted to forest. In general, the impact is greater in villages located in steeply sloping topography because the percentage of land conversion increases with slope.

Two villages where more than 70 per cent of total cropland was converted to forest under *Tuigeng huanlin* were selected for our field study. One, which we refer to as "M village," is located in the middle reaches of the Yellow River, and lies on the outskirts of Yan'an city, Shanxi province. The other, which we have called "G village," lies in the upstream portion of the Long River and is located on the edge of Guiyang city, Guizhou province. These two villages allow us to compare the different effects of the programme according to the conditions of the dry north and the moist south. Although meteorological conditions varied greatly, our field study identified the following common points shared by the two study villages and which can be considered to be characteristic of the impacts of *Tuigeng huanlin*:

- Under *Tuigeng huanlin*, the raising of livestock is expected to substitute for agriculture. The government prohibited pasturing in the reforestation sites to encourage a shift to keeping livestock in enclosures. However, this is very difficult to implement because of a shortage of technology, capital and fodder.
- Farmers want to practice intercropping in the reforestation sites, but intercropping is illegal under the programme and this has caused increasing unrest amongst farmers.
- The number of farmers seeking off-farm work away from their families has increased as it is difficult to sustain the same level of livelihood after *Tuigeng huanlin*. Job-hunting is difficult as the competition for work is increasing because the number of farmers who cannot manage the extra working hours necessitated by *Tuigeng huanlin* is growing.

Prohibition of pasturing and the collapse of livestock raising

In the case of M village in the Yellow River basin, a large number of farmers raising livestock were pasturing goats for cashmere and meat production. However, the number of farmers who earn an income from raising livestock decreased by up to 39 per cent after *Tuigeng huanlin*, compared with the 76 per cent of farmers for whom stock raising was a main occupation prior to the programme. Goat breeding has almost collapsed (Table 1).

The government prohibits pasturing in the reforestation sites and instead encourages "enclosure keeping" in the backyards. This strategy has completely failed in M village. One farmer who had raised livestock prior to *Tuigeng huanlin* stated:

> *I have been engaged in pasturing about forty goats. I was able to allow them to go to the steep mountains and not be worried by a shortage of grass. Everyone can graze livestock as long as*

the time is available. It is not harmful to farming activities. However, raising livestock in enclosures is not as easy as allowing it to graze. We must grow grass in the Tuigeng huanlin area. We need to gather and carry grass from the mountain. This is heavy, additional work for us and we must buy grass when there are shortages. Moreover, goats like physical exercise, even climbing precipices. When goats are kept in enclosures they have insufficient exercise. Goats become stressed in a narrow livestock barn, the quality of cashmere falls and the quality of goat meat also decreases. I am so distressed by this that I finally decided to stop raising animals and work away from home (Interview conducted at M village, August 2003).

According to our field survey, with the exception of chickens in G village, the average number of animals kept by each household decreased in both villages after the implementation of *Tuigeng huanlin* (Tables 4 and 5).

As raising livestock under *Tuigeng huanlin* is difficult, off-farm wage employment appears an attractive alternative for farmers. Our field survey shows that while the number of farmers who wished to work away from home increased, the number of working days allocated for wage labour did not increase remarkably after *Tuigeng huanlin* (Tables 6 and 7). This is explained by a lack of job opportunities.

Table 4: Average number of animals per household: M village, the Yellow River basin

	1999: BEFORE THE PROGRAMME	2003: AFTER THE PROGRAMME
Goats	9.83	0.20
Cows	0.81	0.46
Pigs	1.84	1.53
Chickens	1.49	1.32

N=93 households out of 138 in total.

Table 5: Average number of animals per household: G village, the Long River basin

	2001: BEFORE THE PROGRAMME	2002: AFTER THE PROGRAMME
Cows	1.13	0.77
Pigs	3.12	2.48
Chickens	15.50	37.00

N=64 households out of 271 in total.

Table 6: Average annual days per household allocated for off-farm wage labour: M village

	1999: BEFORE THE PROGRAMME	2003: AFTER THE PROGRAMME
Daily employment wage labour near village	38.7	44.1
Wage labour in the city	43.1	44.6

N=93 households out of 138 in total.

Table 7: Average annual days per household allocated to off farm wage labour: G village

	2001: BEFORE THE PROGRAMME	2002: AFTER THE PROGRAMME
Daily employment wage labour near village	76.7	75.2
Wage labour in the city	167.3	195.8

N=64 households out of 271 in total.

Prohibition of intercropping and its effects

In the case of G village, many farmers were engaged in illegal intercropping after *Tuigeng huanlin*, growing, for example, sweet potatoes, soybeans and wheat in the reforestation site. Due to a shortage of employment opportunities in the province and the inadequate grain compensation provided by the government, many farming households resorted to illegal intercropping for their subsistence.

The government is strict in its view of intercropping: intercropping is thought to cause soil erosion as farmers do not have the technological capacity required to practice agroforestry. One government forester in the district stated:

> *Because the farmers have insufficient technical capacity, large-scale intercropping might spur soil erosion. If farmers intercrop soybeans, soil erosion cannot be prevented. Moreover, if farmers cultivate or harvest in the afforestation sites, planted trees will be damaged. Because the level of technical skill among farmers is not necessarily high, all members would not be able to practice agroforestry techniques, even if we gave them training (Interview with a forester at G village, January 2003).*

Officials of the village committee, who are also members of the Communist party, complained about this distrust of farmers by the government. The vice-village chief of G village reflected on government policy as follows:

> *If the government does not trust the farmers, the technology will not reach the farmers. With the preconception that the farmers cannot do anything, the spreading of technology becomes difficult. I think that agroforestry is a technology that almost all farmers can use successfully if technical training is properly given. In the end, it is necessary to trust the farmers for the policy to succeed. After all, any splendid policy will fail if the government does not trust the farmers (Interview of vice-village chief, G village, January 2003).*

Our field study has shown that, contrary to the premises underlying *Tuigeng huanlin*, the farmers engaged in illegal agroforestry practices have properly managed the trees. In fact, the growth rate of saplings is excellent in the illegal agroforestry lots as the farmers use compost in the reforestation sites (Figure 5). This fact is all the more remarkable given that the state provides compensation to the farmer in the left image, but not to the farmers in the right image who engaged in intercropping (at the time the photo was taken). The farmers in the right image decided to continue intercropping because they believed this was the best use of the land, even though they had to surrender the compensation. They felt that intercropping combined with forestation is superior to the government's guidelines for *Tuigeng huanlin*. In their view the benefits to both the trees and their livelihoods outweighed any gains associated with remaining under *Tuigeng huanlin*.

Consequences of an improper balance of tree varieties

The government is encouraging farmers to adjust the ratio of "economic trees" to "ecological trees" to 1:4 in the *Tuigeng huanlin* sites. Economic trees include fruit and tea trees. Ecological trees are mainly native species used in forestry such as pine

Figure 5: Comparison of plantation without intercropping (left) with plantation with illegal intercropping (right)

and poplar. Farmers are more eager to plant economic varieties than ecological trees; their lives will be further impoverished if the government ratio for reforestation sites is followed.

In G village, the government had uniformly distributed seedlings such as pine, cryptomeria and poplar. However, farmers find these types of trees unattractive because their market value is low. The vice-village chief reported:

> *Villagers do not want to plant seedlings supplied by the government. They only reluctantly plant them in order to get food compensation. Since villagers do not have confidence in the planted trees, the management of the reforestation sites is minimal. Villagers feel that the trees will not be profitable, even if they are well-managed (Interview of vice-village chief, G village, August 2002).*

Even if they plant trees for timber, the farmers want to plant more valuable species than pine. Villagers have their own ideas regarding what kinds of species are adaptable to certain ecological and market conditions and how to manage forestation sites. In G village, the pine, cryptomeria, and poplar planted in the reforestation sites are recognised by farmers only as a "substitution ticket" to receive compensation from the government. Therefore, it is likely that some farmers will re-cultivate reforestation sites after the guaranteed compensation term of eight years ends. When questioned about their plans after the guaranteed term of food compensation, 43.8% of village households in G village answered that there would be no alternative but to re-cultivate.

Policy Implications

The forest land in a Chinese village is supposed to be managed collectively under collective ownership. This is the distinct advantage of China's forest governance compared with other developing countries where the forests are owned by the state. In *Tuigeng huanlin*, however, the government is trying to control and regulate the villages' land under top-down national strategies.

Based on our field study of *Tuigeng huanlin* we recommend that:

1. In order to reduce social unrest and to build sustainable rural livelihoods, intercropping and pasturing in forestation sites should be legalised in *Tuigeng huanlin*.

2. In *Tuigeng huanlin*, farmers should be allowed to voluntarily select species of plants, rather than the government selecting and providing seedlings.

3. Rather than formulating policy based on the view that it must regulate and control the actions of local people to preserve forests, the state should facilitate local people to express their concerns and ideas in order to design more appropriate strategies and encourage local enthusiasm for forestation. The reflection of the ideas of villagers in local level forest policy will result in policy that more accurately reflects local specifics.

4. The government should promote incentives over restrictions in order to achieve forestation that benefit both the ecology and the quality of life of local people.

These policy changes would not only bring economic benefits to farmers, but would also have positive ecological impacts by giving farmers more incentive to manage the trees. If the government continues to prioritise ecological rehabilitation through a strict application of existing legislation, ecological conditions will again deteriorate because many farmers will be compelled to reclaim reforestation sites for cultivation after the compensation has ended.

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CAPTIONS FOR SELECTED PHOTOS

Cover for Chapter 1: Local children transporting firewood, Hoa Bhin Province, Viet Nam.
Photo Credit: Kimihiko Hyakumura

Cover for Chapter 2: Manmade pond providing a water source for wildlife, Rajaji National Park, India.
Photo Credit: Henry Scheyvens

p. 34, Chapter 2: Forest guards, Rajaji National Park, India.
Photo Credit: Henry Scheyvens

Cover for Chapter 3: Users holding discussion on implementing pro-poor activities in community forestry with participation of poor users and the executive committee, Gijara Community Forestry User Group, Udharapur, Banke, Nepal.
Photo Credit: Tribhuban Paudel

p. 58, Chapter 3: Forest product collection by members of the Chauri Dada Community Forestry User Group, Manikapur Banke, Nepal.
Photo Credit: Tribhuban Paudel

Cover for Chapter 4: People gathering lotus flowers, Cambodia.
Photo Credit: Kazuhiro Harada

p. 78, Chapter 4: Family in front of their swidden cultivation area, Cambodia.
Photo Credit: Kazuhiro Harada

Cover for Chapter 5: Illegal loggers transporting lauan timber, Philippines. Although Community-Based Forest Management is expected to stop these illegal activities, they are still rampant.
Photo Credit: Yoshiki Seki

p. 100, Chapter 5: Community-based nursery established under Community-Based Forest Management, Philippines.
Photo Credit: Yoshiki Seki

Cover for Chapter 6: Community-based forest fire management in a bamboo forest, Thailand.
Photo Credit: Robert Fisher

p. 122, Chapter 6: Collaborative management of a bamboo forest, Thailand.
Photo Credit: Robert Fisher

Cover for Chapter 7: Acacia trees harvested by a District Forestry Company, Hoa Binh Province, Viet Nam.
Photo Credit: Kimihiko Hyakumura

p. 140, Chapter 7: Indigenous people carrying non-timber forest products that they have collected, Viet Nam.
Photo Credit: Kimihiko Hyakumura

p. 162, left, Chapter 8: Newly planted area of the Tuigeng huanlin programme in the Yellow River Basin, China.
Photo Credit: Yoshiki Seki

p. 162, right, Chapter 8: Four years after the introduction of the Tuigeng huanlin programme in the Yellow River Basin, China.
Photo Credit: Yoshiki Seki

p. 184, Chapter 8: Farmers mobilized for tree planting under the Tuigeng huanlin programme, China.
Photo Credit: Yoshiki Seki